MINISTRY OF HEALTH
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REPORT

ON THE

Health of the County Borough of Belfast for the Year 1962

WILLIAM GEORGE SWANN, M.D., B.Sc., D.P.H., D.P A.
Medical Officer of Health

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COUNTY BOROUGH OF BELFAST

Health Committee
1962

Chairman:

Councillor Miss IRENE MARGARET ELIZABETH McALERY

Deputy Chairman:

Councillor LESLIE STEWART, J.P.

Aldermen:

THOMAS GIBSON HENDERSON
SIR ROBIN KINAHAN, E.R.D., D.L., LL.D., J.P.
CHARLES DALEY
Major WILLIAM DUNCAN GEDDIS, J.P.

Councillors:

JOHN SAMUEL ROLSTON HARCOURT
Miss IRENE MARGARET ELIZABETH McALERY
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HUGH ROBERT BROWN, M.Com.Sc.
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JOHN WILLIAM KENNEDY, O.B.E., J.P., M.P.
WILLIAM JOHN LARGEY
JAMES MARTIN KIRK McCARROLL
DAVID WALSH

HEALTH DEPARTMENT

STAFF AS AT 31st DECEMBER, 1962

Medical Officer of Health and Port Medical Officer:—
W. G. Swann, M.D., B.Sc., D.P.H., D.Obst. R.C.O.G., D.P.A.

Deputy Medical Officer of Health and Deputy Port Medical Officer:—
J. McA. Taggart, M.B., D.P.H., D.P.A.

HEADQUARTERS:—

Administrative Officer:— S. N. Smith, B.Com.Sc.

Administrative Branch:—

3 Receptionist/Operators.

Accounts Branch:—

1 Clerk Higher Division Grade I; 1 Clerical Officer; 3 Clerical Assistants.

Stores Branch:—

1 Clerk Higher Division Grade I; 1 Clerical Officer; 2 Clerical Assistants.

Registration Branch:—

Superintendent Registrar of Births, Deaths and Marriages — J. C. Walker.
1 Deputy Supt. Registrar; 4 Registrars; 3 Deputy Registrars; 2 Typists.

Typing Branch:—

1 Supervisor of Typists; 5 Shorthand Typists; 2 Typists.

ENVIRONMENTAL HEALTH DIVISION:—

Senior Medical Officer—W. J. McLeod, M.D., D.P.H., D.P.A., Ph.C.
Executive Officer—G. H. Davis.

Infectious Diseases Branch:—

Medical Officer—J. A. Gilmore, M.B., D.P.H.
1 Clerk Higher Division Grade II; 10 Clerical Assistants.

Sanitary Branch:—

Chief Public Health Inspector —J. Walker
Senior Food Inspector —W. Jenkins.
Senior Pests and Disinfecting Officer —W. Robinson
Senior Inspector of Factories and Shops —P. J. McMahon
Senior Smoke Officer —C. Ellison.
Senior Port Public Health Inspector —W. A. McBride
Divisional Public Health Inspector, South —W. N. Shields
Divisional Public Health Inspector, West —F. W. Hill
Divisional Public Health Inspector, East —T. F. Mills
Divisional Public Health Inspector, North —J. Thompson

7 Food and Drugs Inspectors; 2 Port Public Health Inspectors; 5 Factory and Shops Inspectors; 1 Smoke Inspector; 25 Public Health Inspectors; 6 Pests Officers; 6 Pupil Public Health Inspectors.

1 Clerk Higher Division Grade I; 1 Clerk Higher Division Grade II; 2 Clerks Higher Division Grade III; 3 Clerical Officers; 8 Clerical Assistants; 1 Clerical Attendant; 1 Notice Server.

Meat Inspection Branch:—

City Veterinarian—J. F. Gracey, Ph.D., B.Agr., M.R.C.V.S., D.V.S.M.
Senior Meat Inspector—G. F. Moore.
6 Meat Inspectors.

MATERNITY AND CHILD HEALTH DIVISION:—

Senior Medical Officer — H. A. Warnock, M.D., B.Sc., D.P.H.
Clinic Medical Officer — K. M. Cathcart, M.B., D.P.H.
9 Part-time Medical Officers
Superintendent Nursing Officer — Miss M. F. J. Baird, S.R.N., S.C.M., H.V.Cert.
Deputy Superintendent Nursing Officer — Mrs. E. F. McLeister, S.R.N., S.C.M., H.V.Cert.
Superintendent of District Nurses — Miss H. A. Harris, S.R.N., S.C.M., H.V.Cert., Q.N.
Supervisor of Midwives — Mrs. M. A. Whinnery, S.R.N., R.S.C.N., S.C.M.
Area Superintendent Health Visitors — Mrs. M. E. Duke, S.R.N., S.C.M., H.V.Cert.
Miss J. Stirling, S.R.N., S.C.M., H.V. Cert.
Miss K. Smyth, S.R.N., S.C.M., H.V. Cert.

First Assistant Superintendent of District Nurses:—
Miss D. Ritchie, S.R.N., S.C.M., H.V. Cert., Q.N.

Second Assistant Superintendent of District Nurses:—
Mrs. A. Beattie, S.R.N., S.C.M., Q.N.

53 Health Visitors; 47 District Nurses; 3 State Registered Nurses; 3 State Enrolled Nurses; 2 Senior Midwives; 23 Midwives (salaried); 17 Midwives, (fee-per-case).

Chiropodist — Miss M. Still, S.R.N., M.Ch.S.
1 part-time Chiropodist

Executive Officer — A. Watson, A.C.I.S.

1 Higher Division Clerk, Grade 2; 3 Clerical Officers; 1 Shorthand Typist; 1 Typist; 15 Clerical Assistants; 9 Clinic Clerks (part-time); 3 Cook-Housekeepers.

SCHOOL HEALTH DIVISION:—

Senior Medical Officer — A. L. Walby, M.B., D.P.H.

Clinic Medical Officers:— A. D. Campbell, M.B., D.P.H.
E. A. M. McMordie, M.B., D.P.H.
P. S. Kerr, M.B., D.P.H.
K. McKee, M.D., D.P.H., D.C.H.

Medical Officers: — A. P. Watson, M.B., D.P.H.
G. K. Moffatt, M.B., D.P.H.
D. B. Keith, M.B., D.P.H.
K. M. Corbett, M.D., B.Sc., D.P.H., D.C.H.
S. G. Gordon, M.B., B.S., M.R.C.S., L.R.C.P., D.C.H., D.T.M.H.
F. L. O'Rourke, M.B., D.P.H.

Chief Dental Officer: — S. R. Sheane, L.D.S.

Clinic Dental Officers: — V. M. G. Rattie, L.D.S.
H. C. Thornberry, L.D.S.
P. J. R. Griffith, M.B., L.D.S.
J. R. Faulkner, L.D.S.

Dental Officers: — W. R. Morrow, L.D.S.
J. B. Hanna, L.D.S.
T. S. Brannigan, L.D.S.
W. J. Hutchinson, L.D.S.
H. M. Gilfillan, L.D.S.
J. S. Jassal, L.D.S.
W. J. C. Davidson, L.D.S.
N. M. Stratford, L.D.S.
O. Love, L.D.S.
M. P. Cassidy, L.D.S.

7 Part-time Medical Officers (Anaesthetists); 5 Part-time Dental Officers.

4 Senior School Nurses; 24 Health Visitors; 1 Speech Therapist; 2 Speech Therapists (part-time); 2 Physiotherapists; 1 Chief Dental Clerk; 3 Senior Dental Surgery Assistants; 29 Dental Surgery Assistants.

Executive Officer — R. T. Curry.

1 Clerk Higher Division Grade II; 1 Clerical Officer; 5 Shorthand Typists; 1 Typist; 1 Senior Clerical Assistant; 12 Clerical Assistants.

COUNTY BOROUGH OF BELFAST

SUMMARY OF VITAL STATISTICS, 1962

Area (Census 1951) (exclusive of 1,223 acres of tidal water)	15,357 acres (24 sq. miles)
Population	413,900 (estimate of Registrar General for N.I., June, 1962) (males 195,300; females 218,600)
Marriages	3,416
Marriage rate	8.3
Live births registered	8,636 (4,398 males; 4,238 females)
Rate	20.9
Average rate for the ten years 1953-1962	19.3
Still Births registered	225
Rate per 1,000 live and still births	25
Illegitimate births	228 (121 males: 107 females)
Illegitimate births as a percentage of total births	2.6
Deaths	4,594 (2,302 males; 2,292 females)
Rate	11.1
Average rate for the ten years 1953-1962	10.9
Deaths of infants under one year of age	252 (126 males; 126 females)
Infant mortality rate	29 deaths per 1,000 live births
Average rate for the ten years 1953-1962	30 deaths per 1,000 live births
Neo-Natal deaths (under one month)	172 (115 males; 84 females)
Neo-Natal death rate	20 per 1,000 live births
Average rate for the ten years 1953-1962	21 per 1,000 live births
Maternal deaths	4
Death rate	0.46 per 1,000 births registered
Deaths from communicable diseases listed in Table 9	38
Death rate from these diseases	0.09
Deaths from Measles	Nil
Deaths from Typhoid Fever	Nil
Deaths from Scarlet Fever	Nil
Deaths from Whooping Cough	3
Deaths from Diphtheria	Nil
Deaths from Diarrhoea and Enteritis (under two years of age)	16
Deaths from Dysentery	1
Deaths from Influenza	16
Deaths from Tuberculosis of the respiratory system	39
Death rate from Tuberculosis of the respiratory system	0.09
Deaths from Bronchitis	315
Deaths from Pneumonia	189

To:

The Right Honourable The Lord Mayor, Aldermen and Councillors of the Belfast County Borough Council acting as the Belfast Health Authority and the Belfast Port Sanitary Authority:—

My Lord Mayor, Ladies and Gentlemen,

I herewith submit the Annual Report for the year 1962.

The estimated mid-year population of the City has fallen by 2,600 to 413,900. There was a decrease of 170 in the number of births registered compared with 1961.

The number of deaths registered was 4,594, a decrease of 395. Cancer deaths rose by 14 to 777. There was a decrease in the infantile mortality rate from 33 to 29. There was 37 deaths from motor vehicle accidents, 7 less than in 1961. There was an increase of deaths from tuberculosis from 41 to 42 though the number of cases notified continues to fall, being 221 compared with 334 in 1961.

The detailed statistics as required by the Ministry of Health and Local Government together with an outline of the work undertaken by the divisions of the Department are given in the following pages by the officer in charge of each.

I wish to thank the Chairman and members of the Health Committee for their interest, consideration and help in the execution of the functions of the Committee.

I am pleased to pay tribute to the members of the Staff of the Department for their loyal, efficient and conscientious service and personal support throughout the year.

I have the honour to be,

My Lord Mayor, Ladies and Gentlemen,

Your obedient servant,

W. G. SWANN,

Medical Officer of Health and Port Medical Officer.

CAUSES OF DEATH AT DIFFERENT AGE PERIODS, 1962

TABLE 1

Abbreviated List Nos.	Causes of Death	Total Deaths	MALES												FEMALES											
			All Ages	AGED											All Ages	AGED										
				Under 1 mth.	1—5 mths.	6—11 mths.	Total Under 1 year	1-4	5-14	15-24	25-44	45-64	65-74	75 & over		Under 1 mth.	1—5 mths.	6—11 mths.	Total Under 1 year	1-4	5-14	15-24	25-44	45-64	65-74	75 & over
	All Causes	4,594	2,302	86	34	6	126	14	6	18	81	727	651	679	2,292	86	26	14	126	14	7	15	66	460	589	1,015
B1	Tuberculosis of Respiratory System	39	32	—	—	—	—	—	—	—	3	14	11	4	7	—	—	—	—	—	—	1	3	1	—	2
B2	Tuberculosis, other Forms	3	1	—	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—	—	2	—	—
B3	Syphilis and its sequelae	15	7	—	—	—	—	—	—	—	—	1	5	1	8	—	1	—	1	—	—	—	—	1	5	1
B4	Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B5	Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B6	Dysentery, all forms	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1	—	—	—	—	—	—	—
B7	Scarlet Fever and streptococcal sore throat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B8	Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B9	Whooping Cough	3	2	—	2	—	2	—	—	—	—	—	—	—	1	—	1	—	1	—	—	—	—	—	—	—
B10	Meningococcal Infections	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	1	—	1	—
B11	Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B12	Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B13	Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B14	Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B15	Typhus and other Rickettsial diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B16	Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B17	Other Infective and Parasitic diseases	7	4	—	—	—	—	—	—	—	1	2	—	1	3	1	—	—	1	—	—	—	—	1	1	—
B18	Malignant Neoplasms, including neoplasms of lymphatic and haematopoietic tissues																									
	(a) Cancer	777	409	—	—	—	—	2	1	2	14	162	137	91	368	—	—	1	1	—	1	4	21	136	103	102
	(b) Hodgkins disease and Leukaemia	27	13	—	—	—	—	—	1	2	—	5	1	4	14	—	1	—	1	—	1	—	3	4	2	3
B19	Benign and unspecified neoplasms	15	7	—	—	—	—	—	—	—	1	4	2	—	8	—	—	—	—	1	—	—	3	—	2	2
B20	Diabetes Mellitus	23	10	—	—	—	—	—	—	—	1	5	3	1	13	—	—	—	—	—	1	—	1	2	5	5
B21	Anaemias	26	9	—	—	—	—	—	—	—	—	2	2	5	17	—	—	—	—	—	1	—	—	6	4	6
B22	Vascular Lesions affecting Central Nervous System	606	236	—	—	1	1	—	—	1	1	71	82	80	370	—	—	—	—	—	—	—	2	64	97	207
B23	Nonmeningococcal Meningitis	2	1	—	—	—	—	1	—	—	—	—	—	—	1	—	—	1	1	—	—	—	—	—	—	—
B24	Rheumatic Fever	6	1	—	—	—	—	—	—	—	—	—	—	1	5	—	—	—	—	—	—	1	—	2	1	1

B25	Chronic Rheumatic Heart Disease	66	18	—	—	—	—	—	—	—	5	8	2	3	48	—	—	—	—	—	—	2	7	25	9	5
B26	Arteriosclerotic and Degenerative Heart Disease	1,300	698	—	—	—	—	—	—	—	22	247	218	211	602	—	—	—	—	—	—	1	6	101	175	319
B27	Other Diseases of Heart	128	58	—	—	—	—	—	—	—	—	10	12	36	70	—	—	—	—	—	—	—	1	7	17	45
B28	Hypertension with Heart Disease	94	31	—	—	—	—	—	—	—	—	8	12	11	63	—	—	—	—	—	—	—	1	7	21	34
B29	Hypertension without Heart Disease	26	12	—	—	—	—	—	—	1	1	5	5	—	14	—	—	—	—	—	—	—	—	6	3	5
B30	Influenza	16	6	—	—	—	—	—	—	—	—	1	2	3	10	—	—	—	—	—	—	—	—	2	3	5
B31	Pneumonia (excluding of new born)	189	77	—	6	1	7	1	—	1	—	7	13	48	112	—	6	5	11	6	—	—	—	5	14	76
B32	Bronchitis	315	205	—	1	—	1	1	—	1	5	81	60	56	110	—	1	2	3	—	—	—	—	28	36	43
B33	Ulcer of Stomach and Duodenum	37	24	—	—	—	—	—	—	—	—	5	6	13	13	—	—	—	—	—	—	—	—	4	3	6
B34	Appendicitis	3	2	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	1	—	—	—
B35	Intestinal Obstruction and Hernia	42	14	—	1	—	1	1	—	—	—	2	5	5	28	3	1	—	4	—	1	—	—	4	9	10
B36	Gastritis, Duodentis, Enteritis and Colitis, except Diarrhoea of the new-born	22	10	—	3	1	4	1	—	—	—	2	3	—	12	—	5	1	6	1	—	—	—	—	1	4
B37	Cirrhosis of Liver	19	11	—	—	—	—	—	—	—	2	5	3	1	8	—	—	—	—	—	—	—	—	3	3	2
B38	Nephritis and Nephrosis	18	10	—	—	—	—	—	—	2	3	1	3	1	8	—	—	—	—	—	—	1	1	1	2	3
B39	Hyperplasia of Prostate	15	15	—	—	—	—	—	—	—	—	—	4	11	—	—	—	—	—	—	—	—	—	—	—	—
B40	Complications of Pregnancy, Childbirth and the Puerperium	4	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	1	3	—	—	—
B41	Congenital Malformations	76	32	16	7	—	23	4	1	—	1	3	—	—	44	31	5	3	39	1	1	—	2	1	—	—
B42	Birth Injury, Postnatal Asphyxia and Atelectasis																									
	(a) With Prematurity	25	19	18	1	—	19	—	—	—	—	—	—	—	6	6	—	—	6	—	—	—	—	—	—	—
	(b) Without Prematurity	20	9	9	—	—	9	—	—	—	—	—	—	—	11	11	—	—	11	—	—	—	—	—	—	—
B43	Infections of the New-born																									
	(a) With Prematurity	1	1	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(b) Without Prematurity	11	6	6	—	—	6	—	—	—	—	—	—	—	5	5	—	—	5	—	—	—	—	—	—	—
B44	Other Diseases peculiar to early infancy																									
	(a) With Prematurity	57	31	31	—	—	31	—	—	—	—	—	—	—	26	26	—	—	26	—	—	—	—	—	—	—
	(b) Without Prematurity	4	4	4	—	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B45	Senility without mention of Psychosis, Ill-defined and Unknown Causes	23	10	—	—	—	—	—	—	—	—	2	—	8	13	—	—	—	—	—	—	—	—	1	1	11
B46	All other Diseases	361	178	1	11	1	13	1	1	1	4	51	46	61	183	2	3	1	6	2	1	3	6	33	50	82
BE47	Motor Vehicle Accidents	37	23	—	—	—	—	2	—	6	6	8	4	2	14	—	—	—	—	3	1	1	1	2	3	3
BE48	All other Accidents	101	48	—	2	2	4	—	2	1	4	12	7	18	53	—	1	—	1	—	—	—	1	4	14	33
BE49	Suicide	31	18	—	—	—	—	—	—	—	7	8	2	1	13	—	—	—	—	—	—	—	2	7	4	—
BE50	Homicide and Operations of War	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	1	—	—	—	—	—	—	—
—	Gastro-Enteritis and Colitis of Children under two years of age (included in B.36 and B.43)	16	7	2	3	1	6	1	—	—	—	—	—	—	9	2	5	1	8	1	—	—	—	—	—	—
—	Pneumonia of new-born (included in B.43)	8	5	5	—	—	5	—	—	—	—	—	—	—	3	3	—	—	3	—	—	—	—	—	—	—

TABLE 2 Number of deaths, death rates and percentages of total deaths by age groups

Age Group (Years)	Deaths			Rate per 1,000 of population of age group (based on 1961 Census figures)	Percentage of total deaths
	Male	Female	Total		1962
Under 1 Year	126	126	252	30.0	5.5
1— 4	14	14	28	0.9	0.6
5—14	6	7	13	0.2	0.3
15—19	10	6	16	0.4	0.3
20—29	17	12	29	0.5	0.6
30—39	41	38	79	1.6	1.7
40—49	104	74	178	3.4	3.9
50—59	354	223	577	11.1	12.5
60—69	636	444	1,080	28.2	23.5
70 and over	998	1,348	2,342	91.5	51.0

TABLE 3 Principal causes of death in order of importance

1.	Heart Disease (B26-27)	1,428
2.	Cancer	777
3.	Vascular Lesions affecting the central nervous system	607
4.	Bronchitis	315
5.	Pneumonia	189
6.	Violent and accidental deaths	170
7.	Hypertension	120
8.	Associated with prematurity	83
9.	Congenital malformations	76
10.	Chronic rheumatic heart disease	66

TABLE 4 Comparative Statistics for Counties and County Boroughs, 1962

Area	Rate per 1,000 population				Rate per 1,000 live births		Still-birth rate per 1,000 total births	Accidental deaths
	Marriage	Birth	Death	Death rate from tuber-culosis	Infant Mortality	Maternal mortality per 1,000 live births		
Northern Ireland	6.9	22.7	10.6	0.07	27	0.28	23	506
Belfast C. B.	8.3	20.9	11.1	0.10	29	0.35	25	138
Londonderry C. B.	8.2	30.4	9.6	0.06	22	—	21	14
Co. Antrim	6.4	23.9	9.6	0.07	26	0.45	22	104
Co. Armagh	6.4	23.2	10.9	0.06	24	0.37	20	28
Co. Down	5.9	20.8	10.7	0.06	28	—	22	88
Co. Fermanagh	5.4	21.0	12.3	0.02	24	—	20	23
Co. Londonderry	6.1	25.2	10.1	0.04	28	—	24	51
Co. Tyrone	6.4	24.7	10.8	0.08	21	0.60	17	60

Trend of mortality from certain principal causes of death from 1910

TABLE 5

Year	Heart Disease		Cancer		Pulmonary Tuberculosis		Bronchitis, Influenza and Pneumonia	
	Number	Rate Per 1,000	Number	Rate Per 1,000	Number	Rate Per 1,000	Number	Rate Per 1,000
1910	—	—	—	—	825	2.1	1,538	3.9
1915	—	—	—	—	813	2.0	1,667	4.1
1920	—	—	—	—	762	1.8	1,566	3.8
1925	—	—	—	—	575	1.3	1,163	2.7
1930	852	2.0	466	1.12	346	1.0	839	2.0
1935	935	2.0	463	0.99	389	0.89	1,042	2.23
1940	1,387	3.1	576	1,29	412	0.93	1,001	2.25
1945	1,130	2.59	664	1.52	326	0.75	533	1.22
1950	1,500	3.33	717	1.59	225	0.5	565	1.26
1951	1,630	3.67	693	1.56	221	0.49	813	1.83
1952	1,416	3.18	757	1.7	151	0.34	483	1.0
1953	1,155	2.56	758	1.68	114	0.26	466	1.03
1954	1,348	3.0	777	1.7	84	0.18	482	1.07
1955	1,365	3.0	741	1.6	76	0.17	597	1.3
1956	1,297	2.9	840	1.89	74	0.16	471	1.06
1957	1,383	3.14	844	1.9	60	0.13	592	1.34
1958	1,493	3.42	822	1.88	56	0.13	549	1.25
1959	1,443	3.33	802	1.85	62	0.16	657	1.51
1960	1,476	3.4	793	1.84	28	0.07	546	1.25
1961	1,425	3.4	763	1.83	35	0.08	876	2.1
1962	1,428	3.45	777	1.87	39	0.09	520	1.25

— Signifies information not available

Comparative Statistics; Belfast, Northern Ireland, England and Wales, Scotland and Irish Republic, 1962

TABLE 6

	Belfast	Northern Ireland	England and Wales	Scotland	Irish Republic (See Note)
1. Rates per 1,000 Population:					
Marriages	8.3	6.9	7.5	7.7	5.5
Births	20.9	22.7	18.0	20.1	21.9
Deaths	11.1	10.6	11.9	12.2	12.0
2. Death rates per 1,000 live births:					
Maternal	0.35	0.28	0.36	0.4	0.4
Infant	29	27	21.7	27	29
3. Death rates per 100,000 population:					
Tuberculosis	10.0	7.0	6.6	8.4	15.1
Cancer	188	154	210	213	166.7
Heart Diseases (B25-28)	384	402	392.2	417	415
Coronary disease	237	208	215.6	224	155
Diphtheria	Nil	Nil	0.0	Nil	0.0
4. Still-birth rate per 1,000 total births	25	23	18.1	20	No figures

Note: Figures for Irish Republic provisional

TABLE 7

Population, births, birth rate per 1,000, deaths, death rate per 1,000 and natural increase from 1890

Year	Population	Births		Deaths		Natural increase
		Number	Rate	Number	Rate	
1890	232,222	8,250	35.5	6,861	29.5	1,389
1895	295,000	9,772	33.1	7,168	24.3	2,604
1900	359,000	11,192	31.2	7,642	21.3	3,550
1905	360,000	11,395	31.8	7,178	20.0	4,217
1910	391,167	10,888	27.8	7,284	18.6	3,604
1915	403,000	10,196	25.3	7,220	17.9	2,976
1920	413,000	12,144	29.4	7,234	17.5	4,910
1925	438,000	10,234	23.4	6,131	14.0	4,103
1930	415,151	9,558	22.7	5,451	12.9	4,107
1935	415,151	8,848	21.3	6,238	15.0	2,610
1940	444,500	8,704	19.6	6,583	14.8	2,121
1941	444,500	8,383	18.9	6,641	14.9	1,742
1942	444,500	9,659	21.7	4,973	11.2	4,686
1943	425,000	10,713	25.2	5,511	13.0	5,202
1944	430,800	10,456	24.3	5,176	12.0	5,280
1945	435,900	9,853	22.6	5,069	11.6	4,784
1950	450,000	8,834	19.6	5,082	11.3	3,752
1951	444,222	8,789	19.8	5,433	12.2	3,356
1952	444,200	8,506	19.1	4,778	10.8	3,728
1953	450,800	8,527	18.9	4,653	10.3	3,874
1954	449,100	8,302	18.5	4,810	10.7	3,492
1955	453,900	8,100	17.8	4,752	10.5	3,348
1956	444,800	8,212	18.5	4,632	10.4	3,580
1957	440,100	8,459	19.2	4,899	11.1	3,560
1958	436,200	8,263	18.9	4,818	11.0	3,445
1959	433,800	8,365	19.3	4,821	11.1	3,544
1960	433,900	8,736	20.1	4,737	10.9	3,999
1961	416,500	8,806	21.1	4,989	12.0	3,817
1962	413,900	8,636	20.9	4,594	11.1	4,042

TABLE 8

Deaths from cancer by sex and site in 1962

Detailed List Nos.	Sites	Males	Females
	Buccal Cavity and Pharynx		
140	Lip	—	—
141	Tongue	2	—
142	Salivary gland	2	1
143—144	Mouth	1	—
145—148	Pharynx	1	4
	Digestive Organs and Peritoneum		
150	Oesophagus	2	11
151	Stomach	75	59
152—153	Intestines	31	32
154	Rectum	25	24
155—156	Biliary passages and liver	8	22
157	Pancreas	18	15
158	Peritoneum	3	1
159	Other digestive organs	—	—
	Respiratory System		
160	Nose, nasal cavities, etc.	—	1
161	Larynx	5	2
162—163	Trachea, bronchus and lungs	145	26
164	Mediastinum	—	—
165	Thoracic organs (secondary)	—	—
	Breast and Genito-Urinary Organs		
170	Breast	2	60
171—174	Uterus	—	36
175	Ovary, Fallopian tube and broad ligament	—	23
176	Other female genital organs	—	5
177	Prostate	22	—
178	Testis	2	—
179	Other male genital organs	5	—
180	Kidney	7	4
181	Bladder and other urinary organs	9	3
	Other and Unspecified Sites		
190—191	Skin	7	4
192	Eye	2	3
193	Brain and other parts of the nervous system	6	6
194	Thyroid gland	—	1
195	Other endocrine glands	—	2
196	Bone	5	5
197	Connective tissue	1	—
198—199	Other Sites	11	11
200—202 203—205	Neoplasms of lymphatic and haematopoietic tissues (exclusive of Hodgkin's disease, leukaemia, etc.)	12	7
	Total	409	368

TABLE 9

Deaths from certain communicable diseases from 1890

Year	Meningo-coccal infections	Diph-theria	Dysentery	*Gastro-Enteritis	Measles	Polio-myelitis	Scarlet fever	Typhoid fever	Whooping cough	Influenza
1890	—	37	—	247	378	—	41	177	292	—
1895	—	34	—	325	197	—	88	184	109	—
1900	—	54	—	241	42	—	14	261	115	—
1905	—	32	—	295	227	—	35	128	24	—
1910	3	27	—	241	504	—	18	18	259	—
1915	39	27	—	240	177	0	107	10	134	—
1920	4	45	1	223	132	0	94	34	84	243
1925	0	38	0	203	167	0	49	18	99	84
1930	—	22	0	116	6	—	7	2	65	38
1935	0	55	0	249	251	2	37	11	22	65
1940	22	85	0	316	150	1	10	1	54	161
1945	2	7	1	188	10	4	2	1	26	16
1950	5	3	0	37*	5	11	2	1	16	32
1951	4	1	4	54	3	2	1	0	4	232
1952	4	0	0	43	4	2	0	0	10	18
1953	2	0	0	70	3	1	0	0	8	24
1954	2	0	1	29	2	1	0	0	2	20
1955	5	0	3	31	2	0	0	0	10	34
1956	10	0	1	8	0	1	0	0	6	27
1957	0	0	0	12	2	2	0	0	1	63
1958	1	0	1	13	0	0	0	0	5	13
1959	3	0	3	12	1	0	0	0	7	40
1960	0	0	2	10	0	1	0	0	0	8
1961	0	0	0	13	2	3	0	0	0	124
1962	2	0	1	16	0	0	0	0	3	16
Average Annual Deaths 1952-61	2.7	0	1.1	24.1	1.6	1.1	0	0	5.2	37.1

— Signifies information not available

* From 1950 onwards, deaths of those under 2 years of age only.

TABLE 10

Notifications of certain communicable diseases from 1900

Year	Cerebro-Spinal fever	Diph-theria	Dysentery	Food poison-ing	Gastro-Enteritis	Infective hepatitis	Measles	Polio-myelitis	Puer-peral pyrexia*	Scarlet fever	Ty-phoid fever	Whooping cough
1900	—	407	—	—	—	—	—	—	44	658	1,777	—
1905	—	234	—	—	—	—	—	—	19	650	631	—
1910	—	238	—	—	—	—	—	—	16	734	95	—
1915	65	179	—	—	—	—	—	1	6	1,994	49	—
1920	8	300	—	—	—	—	—	1	48	1,939	210	—
1925	5	423	—	—	—	—	—	0	5	1,657	143	—
1930	24	118	—	—	—	—	—	9	20	1,132	32	—
1935	19	1,201	—	—	—	—	6,203	22	31	3,394	117	337
1940	166	1,165	—	—	—	—	5,062	2	9	1,266	17	701
1945	39	213	—	—	—	—	1,702	20	1	768	14	603
1950	22	45	35	55	377	28	4,209	109	4	1,668	5	1,078
1951	34	10	170	40	560	54	3,354	36	4	349	24	834
1952	44	3	69	16	489	74	2,702	65	56	399	7	2,131
1953	29	1	112	26	614	69	3,146	47	55	612	8	945
1954	32	1	217	23	513	59	1,613	14	42	496	5	773
1955	26	0	401	29	689	65	4,328	3†	46	791	23	1,460
1956	20	0	198	31	412	166	1,797	9	37	540	8	790
1957	14	0	269	18	410	112	4,109	141	50	492	4	119
1958	9	0	310	24	430	83	280	11	29	384	2	1,132
1959	14	0	278	27	450	179	4,731	11	18	506	10	721
1960	2	0	276	58	455	296	487	3	36	519	0	88
1961	12	0	232	40	420	132	3,976	13	23	306	0	74
1962	13	0	326	35	401	71	1,535	5	17	194	0	635
Average Annual Notif-ications 1952-61	20	1	236	29	488	124	2,717	32	39	505	7	823

— Signifies information not available

* Figures up to 1951 for Puerperal fever only

† Diagnosis of two of these cases was subsequently amended to Diphtheria and acute Encephalitis

NOTES:—

1. Food poisoning notifiable only since 1949.
2. Measles—notifiable only as the first case occurring in a household within a period of 2 months.
3. Whooping cough— notifiable only as the first case occurring in a household within a period of 3 months.

TABLE 11

Notification of certain communicable diseases in 1962, by age periods and sexes.

DISEASE	Under 1 Year		1 Year and under 2 Years		2 Years and under 5 Years		5 Years and under 10 Years		10 Years and under 15 Years		15 Years and under 25 Years		25 Years and under 45 Years		45 Years and upwards		Age unknown		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Dysentery	15	23	18	25	40	33	45	32	9	10	6	10	10	13	11	10	2	14	326
Cerebro-Spinal meningitis	2	1	3	1	—	2	—	—	1	—	2	—	—	1	—	—	—	—	13
Poliomyelitis	—	—	1	—	2	1	—	—	—	—	—	—	1	—	—	—	—	—	5
Infective hepatitis	—	—	—	—	3	2	16	11	4	9	2	6	2	7	2	6	—	—	70

Diphtheria and Typhoid Fever—No cases.

TABLE 11A

Type and age grouping of Dysentery notifications

DYSENTERY TYPE	Under I Year		1 Year and under 2 Years		2 Years and under 5 Years		5 Years and under 10 Years		10 Years and under 15 Years		15 Years and under 25 Years		25 Years and under 45 Years		45 Years and upwards		Age unknown		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Sonne	15	22	17	24	31	27	36	27	8	7	1	8	7	10	6	6	1	12	265
Flexner	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	—	—	3
Not classified	—	1	1	1	9	6	9	5	1	3	5	2	2	3	4	3	1	2	58
Total	15	23	18	25	40	33	45	32	9	10	6	10	10	13	11	10	2	14	326

Diphtheria Immunisation

During the year 5,665 children completed a course of immunisation against diphtheria; of these 3,127 were immunised by the Health Committee's Medical Officers at clinics, schools, etc., and 2,538 by general practitioners. In addition, 1,607 children received reinforcing injections, 1,481 by Health Committee's Medical Officers and 126 by general practitioners.

TABLE 12

Age Grouping of Immunised Children

Age at end of Year	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	At end of 1962
0—	158	147	330	357	269	610	911	900	1,117	1,006	
1—	1,809	1,719	1,885	1,978	1,677	1,945	2,240	2,316	2,765	2,535	Age Groups 1-4 years 15,692
2—	885	920	857	791	724	746	751	573	631	489	
3—	329	301	315	356	276	275	362	243	304	181	
4—	240	198	246	258	201	150	218	178	238	120	
5—	526	522	642	668	622	179	237	256	405	248	Age Groups 5-9 years 21,367
6—	782	834	999	922	749	57	155	244	665	415	
7—	398	528	509	497	373	43	106	171	625	347	
8—	177	262	227	190	112	29	71	72	375	163	
9—	45	73	68	42	17	6	36	29	106	51	
10+	92	101	63	43	45	3	87	50	108	112	
Total	5,441	5,605	6,141	6,102	5,065	4,043	5,174	5,032	7,339	5,707	

WHOOPING COUGH IMMUNISATION

(Children Immunised with Triple Antigen; Diphtheria/Pertussis or Pertussis alone)

TABLE 13

Age at end of Year	1955	1956	1957	1958	1959	1960	1961	1962	Total of age Group at end of Year
0—	310	338	258	586	904	814	1,104	999	999
1—	1,729	1,838	1,596	1,884	2,179	2,216	2,712	2,491	3,595
2—	719	676	642	707	698	526	627	474	4,000
3+	372	471	353	497	639	506	271	413	

POLIOMYELITIS IMMUNISATION

Table showing the age groups of persons immunised from May, 1957 to December, 1962

TABLE 14

Age	Two Doses	Three Doses	Four Doses	Total
Under 5 years	5,262	13,526	7,165	25,953
5 and under 15	14,121	31,445	13,845	59,411
15 and over	18,172	41,994	—	60,166

COMMUNICABLE DISEASES

The number and severity of cases of notifiable diseases continues to decrease. There were no cases of Diphtheria or Typhoid Fever.

Compared with 1961 there were substantial reductions in notifications. There were decreases in pulmonary Tuberculosis by 18%, Poliomyelitis by 54%, Infective Hepatitis by 54%, Food Poisoning by 12% and Scarlet Fever by 37%.

An epidemic of whooping cough was overdue, yet the year's notifications reached a figure of only 635, which is less than the average of the last 10 years. An exact assessment of the value of immunisation against whooping cough is hard to make because of the inaccuracy in diagnosis and notification. The following table, compiled from the Department's records, indicates that the non-immunised child has four times as much chance of contracting clinical whooping cough as the immunised child. It is even more important to note that the three deaths from whooping cough occurred amongst non-immunised children.

Whooping Cough—Incidence of notification per 1,000 children

Age Group	*Immunised*	*Non-Immunised*	*Advantage in the Immunised*
1—	3.2	11.0	3.4
2—	2.9	10.2	3.5
3—	2.5	10.4	4.0
4—	2.1	8.4	4.0
5—	2.5	9.8	3.9

One persistently disappointing feature among infections of infants and young children is the persistence of gastro enteritis and dysentery, the notifications of which have not been reduced over the last seven years. The control of these infections depends on a good standard of personal hygiene. Health Visitors continually give instruction on this subject but find that too many parents appear to think that cleanliness is something for others.

There were two family outbreaks of food poisoning and some sporadic cases. Infecting organisms isolated were salmonellae, the types being typhimurium (13 cases), Heidelberg (2 cases), Stanley (2 cases), Dublin (1 case). It is now 15 years since Belfast has had an outbreak of food poisoning or enteric fever associated with food premises or catering establishments and due credit should be given to the health inspectors for the good result of their daily endeavours to maintain a high standard of hygiene in the food trades.

IMMUNISATION

The routine procedures of immunisation against smallpox, diphtheria, whooping cough, tetanus and tuberculosis continue to be provided at schools and clinics. April, 1962 saw the introduction of the oral vaccine against poliomyelitis. During the first quarter of the year 5 cases of poliomyelitis occurred. Due publicity was given to this fact and the demand for immunisation stimulated. Amid the welter of conflicting expert opinion in the "oral versus Salk" vaccine controversy, let us place on record the fact that no cases of paralytic poliomyelitis have occurred in Belfast since oral vaccine came into use.

To obtain the benefits of whooping cough immunisation it is essential that it be performed as early in infancy as possible. At the end of 1962 a survey of children born in July, 1961 was made with a view to finding at what age they had completed their immunisation.

Age in Months	5	6	7	8	9	10	11	12	13	14	15
Number completed	55	66	38	43	32	26	13	7	6	8	4

While this total of 298 is only 39% of the children born during this month, they at least were immunised at an early age.

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REPORT OF THE CHIEF PUBLIC HEALTH INSPECTOR FOR THE YEAR 1962

This section of the Annual Report gives details of the functions of the Chief Public Health Inspector and his staff in connection with environmental health services in the City.

Housing

As public health officers we are conscious of the large number of houses in this City which fall short in many respects of the accepted standards of today. We continue our efforts with energy and confidence that at some future date every house in the City will be not only in good repair, free from damp, adequately lighted and ventilated and in a good structural condition, but will be provided with proper means for the storage of food and have a domestic hot water supply, internal water-closet and a bathroom—in other words, a building in which a family can be brought up in decency and where people can live in comfort.

The housing need, simply stated, is that amount by which the existing suitable accommodation fails to provide a separate home for each family desirous of living on its own within a self-contained unit, the term "family" being used to denote a "household" and not the living together in one dwelling of blood relations.

While the general shortage of houses in the City is recognized, past experience of bad housing conditions gives a complete answer to any question of a return to the provision of small kitchen and parlour houses closely packed. Many houses still in use were built over one hundred years ago and those who were responsible for their building are now judged by the state of those houses and the conditions prevailing therein. In the same way architects and planners of today will be judged fifty and possibly one hundred years hence on the results of their efforts. Viewed from this aspect the aim should be to provide a very good standard on any new housing site to the extent of sacrificing quantity for quality. Possibly the strongest argument against departing from the standards of space and amenity to which we are now conforming is that the reduction in cost and the economies in labour and materials which could be made by the lowering of these standards would be relatively small and wholly disproportionate to the loss of prestige, comfort and standard of living occasioned thereby.

Non-Industrial Premises

The deplorable environmental conditions under which many clerical and other non-industrial workers are compelled to earn their livelihood has given the Department much cause for concern in past years and, notwithstanding the lack of enforcement powers to remedy the situation, every effort has been made by the public health inspector to improve conditions by recourse to persuasion, during contact with occupiers of business premises. Although this action has achieved a measure of success it is clear that there is a real need for obligatory legislation to secure satisfactory environmental working conditions.

Port Inspection

Throughout the year the staff of the Port Health Authority maintained a careful watch over all shipping entering the port. Routine health control measures were in continuous operation throughout the twenty-four hours. The provisions of the Public Health (Ships) Regulations (N.I.) 1954 were enforced at all times. Incoming ships were immediately boarded, inspected and kept under careful supervision whilst in port. Prevention of the importation and spread of communicable diseases is unquestionably the primary function of a port service. The inspection and clearance of vessels arriving at the port must claim the unfailing attention of the port public health inspector. Second in importance is the systematic inspection of imported food for the purpose of assessing its purity and quality, or to discover the presence of adulterants. The number of samples taken for chemical analysis and bacteriological examination of this food will be found under the heading "Port Sanitary".

Air Pollution

Much has been done in the City to ensure a cleaner atmosphere. Smoke observations of factory chimneys are made in an endeavour to reduce and prevent the discharge of black smoke, dust, grit and dangerous fumes. Smoke recording instruments are set up in different parts of the City; these instruments give daily and monthly records. Air tests are carried out in cinemas, theatres and dance halls to ensure a reasonable temperature and air movement, comfortable for the patrons. Attention is also paid to factories, shops, offices, etc., to ensure that suitable and sufficient ventilation is maintained in offensive trades to prevent obnoxious fumes being discharged into the atmosphere.

Food Hygiene

Control is exercised over the composition, standard and quality of food and drugs so as to afford the maximum protection to the ordinary purchaser. It is well known that infection of food is brought about by micro-organisms, incredibly small, though quickly multiplying. In order to prevent the spread of disease, frequent visits are made by the food inspection staff to teach the elementary standards of hygiene and their vital importance to all persons engaged in the preparation, storage and handling of food, so that they may be aware of their responsibilities to the public; to secure the provision of structurally sound buildings with surfaces and equipment capable of being easily cleansed and to enforce suitable and sufficient ventilation, lighting, sanitary accommodation and washing facilities.

Sweet Milk

Only Grade "A" tuberculin tested and pasteurised sweetmilk is sold in the City; sampling is carried out by the food inspection staff for chemical analysis and biological and bacteriological examination to ensure a pure and wholesome supply.

Meat Inspection and Registration of Premises

All food animals are slaughtered at the Public Abattoir. This practice enables both ante and post-mortem inspection to be carried out on cattle, sheep, pigs and goats and ensures that the supply of meat for human consumption is free from disease. Persons carrying on business as a butcher, or engaged in the manufacture or sale of ice-cream and the preparation of fried fish or fried potatoes in premises, require to be registered by the sanitary authority.

Rodent and Insect Pest Control

Effective rodent control methods are in operation and attention is also paid to the possibility of food contamination by these pests. The Health Department finds that the most effective method of establishing satisfactory control is by the clearance of rats from a sufficiently wide and definite area to prevent immediate reinfestation. This method is known as the "block control" principle and is linked with the treatment of sewers. The control of insects is now largely carried out by the use of a Lister-Todd Insecticidal Fog Applicator, or, in the case of mosquito control, blanketing with fog. The machine is capable of covering an area of thirty acres in two hours under suitable atmospheric conditions.

General Inspections

An important aspect of the Department's duties is the prevention of deterioration of existing dwelling houses. A large part of the District Public Health Inspector's time is concerned with the abatement of statutory public health nuisances which mean so much in the way of maintaining the houses in the City (some of which are 100 years old) in a reasonable state fit for human habitation. The services also include the inspection of burial grounds for the protection of public health and decency. Stables, rivers and streams, etc., are inspected for the discovery and abatement of nuisances. Schools are inspected to prevent overcrowding, to secure sufficient and suitable sanitary accommodation, and to teach good environmental habits. Hairdressers' premises are inspected to ensure proper hygienic facilities and the prevention of contagious diseases.

Conservancy System

A number of dwelling houses in the City are still without waterclosets. A total of 94 houses still have either pail closets or privies, and it is not yet practicable for various reasons to convert these to the water-carriage system; e.g., properties not within 150 feet from the public sewer. The dwellings are scattered in the outlying parts of the City.

A number of houses in clearance and redevelopment areas still have to share the use of sanitary accommodation but, as these houses may be expected to be demolished within the next few years, it would not be reasonable to ask the owners to provide additional waterclosets. In addition 24 houses are provided with septic tanks for the collection and purification of sewage matter.

Examination of Plans

The number of plans examined was 304. These plans included amongst other buildings factories, workshops, shops, offices, warehouses and other business premises, schools, canteens, restaurants, flats, etc., and alterations to existing buildings. There is a considerable degree of co-operation between the Corporation's building inspection staff, architects, property and business owners, contractors and the Health Department, which results in the benefits of saving time and reducing costs, by having the work completed to the satisfaction of the local authority.

Itinerants

The itinerant problem as described in this section of previous Annual Reports remained in the City throughout 1962. Itinerant caravan dwellers are a nuisance. Making their appearance "as mushrooms do in the night", they pitch their caravans and shacks just where they please and respect nobody's property. When they depart they leave behind them filth for others to clean up. More often than not converted van bodies are in use. The majority of the occupants are dirty and live with their families in squalor. Their means of livelihood is as haphazard as their mode of living. Legislation to deal with this problem is totally inadequate.

Miscellaneous Defects

The co-operation which the Health Department received from other Corporation Departments and public bodies is fully appreciated. As a result many defects are observed and dealt with. The number of defects discovered by Public Health Inspectors and referred to other Departments during the year and not elsewhere recorded in the body of this report was:—

Estates Superintendent for defects discovered in Corporation owned dwelling houses	612
City Surveyor for various nuisances and defects	1,682
Belfast City and District Water Commissioners for defects in water fittings	928

SEWERAGE AND SEWAGE DISPOSAL

The system of sewage and sewage disposal is under the control of the City Engineer and Surveyor. The drainage of Belfast is on the combined system and for drainage purposes the City is divided into two main areas, one a high level area from which sewage and storm water are discharged by gravity to the sewage outfall works, and the other a low level area from which discharge is by gravity to a main pumping station in Duncrue Street, where both sewage and storm water are pumped to the outfall works. This low level area comprises the central low-lying area of Belfast and all that part of the City which is situated on the County Down side of the River Lagan.

The sewage outfall works are situated in an area of 104 acres of slobland acquired and reclaimed under the Belfast Corporation Act of 1887. Here the sewage is passed through screens, detritus channels and sedimentation tanks into storage ponds and the effluent is discharged to sea during the first 3½ hours of the ebb tide through a reinforced concrete culvert which extends into Belfast Lough a distance of one mile, discharging into deep water. The sludge resulting from the passage of the sewage through the sedimentation tanks is pumped through a steel main into a specially designed steamer in which it is conveyed to the mouth of Belfast Lough and deposited in deep water.

In addition to the main Sewage Pumping Stations, district stations have been established at Shore Road and in Park Avenue, in connection with the drainage of those areas of Counties Antrim and Down which were added to the City under the local act of 1896. These stations are provided with electrically-driven pumps with automatic float controls which discharge the sewage from their respective areas through pressure mains to the City sewers. Automatic electrically-operated pumping stations at Oxford Street, Distillery Street, River Terrace and Queens Bridge deal with storm water at times of heavy rainfall.

During the year The Estates and Markets Committee accepted a tender for the extension of the surface water drainage culvert from the Premier Drive area in connection with the construction of the roads and drainage works for the proposed Abattoir at Duncrue Street. Plans were completed for the construction of the proposed sewage disposal works at Kinnegar and, subject to the necessary approvals, the work should commence early in 1963. Plans were prepared for the second section of the high level intercepting sewer from Mervue Street to Argyle Street and an investigation of the subsoil conditions by the sinking of boreholes had been carried out during the year.

Tenders for the supply of pumping plant for the proposed Glenmachan Street Pumping Station have been received and it is expected that tenders for the building will be invited early in 1963. An overhaul of part of the pumping plant at Duncrue Street and Oxford Street Pumping Stations was carried out.

During the year sewer reconstruction works were completed in Millar Street, Ravenhill Avenue and Fane Street. In connection with the re-laying of the sewer in Fane Street the City Surveyor reported to the Improvement Committee that, under the Blackstaff River Improvement Scheme, provision had been made for the construction of a storm overflow with its connection to the Blackstaff culvert: this was required to afford relief at the earliest moment to Fane Street, which was subject to flooding in heavy rain. The estimated cost of the work was £10,200. The City Surveyor reported to the Improvement Committee that in order to provide drainage for the proposed Halls of Residence at Stranmillis College, to improve the drainage of the area generally and to provide for further drainage requirements, it would be necessary to reconstruct an old sewer through the grounds of Stranmillis College. This is not a Corporation sewer although certain adopted streets are drained into it. The total estimated cost of the scheme is £16,000. Work on the installation of a new Sewage Purification Plant at Sir Thomas and Lady Dixon Park was completed during the year.

REFUSE COLLECTION AND DISPOSAL

This work is carried out by the City Surveyor's Department by means of direct labour under the Superintendent of Cleansing. For administrative purposes the City is divided into sixteen districts, each being supervised by a Cleansing Inspector who is also responsible for street cleansing work. A dustbin squad consists of seven men, one motor driver and a refuse collection vehicle of modern design. These vehicles are maintained in the workshops of the Cleansing Section by a staff of fitters, sheetmetal workers, electricians, joiners, painters, etc. A uniform type of receptacle for the storage of domestic refuse is highly desirable and a good supply of galvanised dustbins of 2½ cubic feet capacity was available during the year under the Corporation dustbin hire scheme. Refuse containers of 1¼ cubic yard capacity now being installed in Corporation flats are emptied by dual purpose vehicles, purchased specially for this work.

Over 170,000 dustbins are emptied weekly, resulting in approximately 3,379 tons of house and trade refuse for disposal. This material is mainly disposed of by controlled tipping, a small amount being incinerated at the Refuse Destructor Works. During the year, tipping space at the Annadale site has been filled and the Holywood Road and Beechmount Tipping Grounds will soon be filled. Tipping in the future will be confined to the Duncrue Street reclamation scheme, and low lying ground on the Harbour Commissioners' Estate at Tillysburn. Problems arising therefrom are under consideration, and this may necessitate a revision of existing practice in order to maintain a regular seven-day emptying of dustbins. The Health Department's services for rodent and insect control are utilised on tipping grounds.

The Corporation have commenced reclaiming approximately 114 acres of the Co. Antrim foreshore of Belfast Lough. The area stretches from roughly in line with the Corporation's pumping station at Northern Road to Fortwilliam. From the shore it reaches out into the Lough for about 600 yards. When the work is completed in about 10 years' time, part of the Ulster Transport Authority railway line will no longer have the water at its seaward side. The scheme means not only further land for eventual development for industrial and recreational purposes, but also solves the Corporation's problem of finding a new tipping ground in the area. Household refuse is dumped there as filling material, saving the expense of carriage to other parts of the city. Altogether, about 1,000 acres of the foreshore are available for reclamation.

During the year Public Health Inspectors made 399 inspections of private and Corporation tipping grounds within the City. In addition 16 rat destruction campaigns were carried out by the Pests Control Section to exterminate rats at tipping grounds. Special attention was given to the fly and insect pests problem by the use of effective insecticides, involving 36 treatments by the Pests Control Section.

WATER SUPPLIES

The City's water supply is controlled by the Belfast City and District Water Commissioners. The district served is approximately 64 square miles and extends beyond the area enclosed by the Belfast County Borough Boundary. The population catered for in the Commissioners' area of supply is close on 533,000 and the daily consumption is about 30 million gallons including that used for industrial purposes. The needs of neighbouring local authorities are also met and bulk supplies to these amount to approximately 30 million gallons per day.

The service area is supplied from three main sources, the largest being in the Mourne Mountains, which supplies on an average 20 million gallons per day. The catchment of the Kilkeel and Annalong Valleys, consisting of upwards of 9,000 acres of mountain slopes free from human habitation, were acquired by the Commissioners. The high quality of the water and the great quantity available were the determining factors in deciding on the use of the two deep valleys for catchment purposes. The Silent Valley Reservoir is capable of storing three thousand million gallons, and the new Ben Crom reservoir has a capacity of one thousand seven hundred million gallons. The service reservoir is about five miles south of the City and the conduit from this point to the Mourne is some 35 miles long. The water from this source is so pure that filtration is not required, although, as a precautionary measure, it is chlorinated at the Knockbracken service reservoir. The water is soft, the total hardness being only 28 parts per million.

The second largest source of supply is from the Woodburn area, near Carrickfergus. This catchment area consists of some 6,937 acres of uplands, a large proportion of which was acquired by the Commissioners. The catchment is almost entirely clear of human habitation. The works comprise seven storage reservoirs, from which the water is conveyed to the service reservoir at Oldpark in Belfast. The water from Woodburn, with the exception of that drawn off at Dunanney, is passed through slow sand filters at Oldpark. There are seven of these filters with a surface area of 26,628 square yards. All water from this source is also chlorinated at this point. The maximum yield of water from this catchment is about 11¼ million gallons per day and, based on the three dry-year minimum yield, should average 8 million gallons per day. The hardness of this water is 88 parts per million.

The third main source is from Stoneyford, near Lisburn. This catchment consists of uplands, with an area of some 5,348 acres and, as in the case of the Woodburn catchment, these lands are largely owned by the Commissioners and contain few human habitations. The works comprise a storage reservoir at Stoneyford and another at Leathemstown, with filter beds at Forked Bridge and a service reservoir at Lagmore. The conduit, 8½ miles in length, conveys the water from Stoneyford and Leathemstown to Lagmore and is passed through slow sand filters at Forked Bridge. There are six filter beds with a surface area of 16,380 square yards. The water is also chlorinated at this point. The water is moderately soft with a hardness of 65 parts per million. The yield of water from this catchment averages about three million gallons per day. The commissioners supply Belfast City and District from the following service reservoirs in addition to the three main service reservoirs, viz., Knockbracken, Oldpark High Service and Lagmore.

Service Reservoir	**Source**	**Gallons per day**
Whiteabbey Lower	Woodburn	1 million
Whiteabbey Upper	Woodburn	1 million
Ballysillan	Woodburn	¾ million
Dunanney	Woodburn	½ million
Colinward	Woodburn	½ million
Ballyaghagan Upper	Woodburn	½ million
Whiterock Upper	Mourne	½ million
Whiterock Lower	Mourne	½ million
Ligoniel Tank	Spring	50,000

All the above reservoirs are sampled weekly. In 1962, 1,103 samples of water were taken for bacteriological examination from points in the distribution mains adjacent to these service reservoirs. These consisted of 11 samples of water before treatment, 463 of filtered and chlorinated water and 629 of chlorinated water. The results showed that 16 samples contained both bact-coli (Type 1) and coliform organisms, and 47 contained coliform organisms. 38 samples had a low pH value. All the samples of untreated water showed both coliform organisms and bact-coli (Type 1). The results of bacteriological examination of the raw waters were typical, showing the normal deterioration in quality which occurs after heavy rain.

The following is a summary of reports on the bacteriological examination of water samples taken via consumers' taps direct from the mains throughout the City by officials of the Water Commissioners and examined at the Counties Public Health Laboratories:—

Number taken	625
Reported as highly satisfactory	591
Showing coliform organisms	34

Water samples collected by the Health Department Staff from consumers' taps

The water supply provided by the Belfast City and District Water Commissioners to consumers within the City area has been satisfactory in quantity. All drinking water supplied by public mains is sterilised by chlorine treatment. Weekly samples have been submitted to the Central Laboratory of the Northern Ireland Hospitals Authority for bacteriological examination. The premises from which the samples are taken are selected to cover, each week, the different sources of supply. During the year the total number of samples thus taken was 304: of this number 296 were reported as highly satisfactory and the remaining 8 samples as unsatisfactory.

The results of the unsatisfactory samples are as follows:—

TABLE B 1

Coliform organisms (Count per 100 ml.)	Number of samples	Coliform organisms of faecal origin (Count per 100 ml.)	Number of samples
1—3	7	1—3	6
4—10	1	4—10	—
Greater than 10	—	Greater than 10	—

6 samples contained both faecal and non-faecal coli.

Samples of Domestic water supply in tenement dwellings

During the year the Department sampled domestic water supply in tenement dwellings. The samples were obtained from consumers' taps in different parts of buildings, let as separate dwellings. In all 286 samples were obtained for bacteriological examination. 271 of these samples were reported as highly satisfactory and 15 as unsatisfactory because of the presence of coliform organisms. 5 samples contained both coliform organisms and faecal coli. In all cases where unsatisfactory results were reported, the District Public Health Inspector visited the premises in order to ascertain if the supply was derived from a water storage tank or direct from the public mains.

The results of the unsatisfactory samples are as follows:—

TABLE B 2

Coliform organisms (Count per 100 ml.)	Number of samples	Coliform organisms of faecal origin (Count per 100 ml.)	Number of samples
1—3	7	1—3	4
4—10	5	4—10	1
Greater than 10	3	Greater than 10	—

5 samples contained both faecal and non-faecal coli.

Samples of water from Mineral Water Manufacturers' premises

During the year 129 samples of water were taken by the Food Inspection Staff for bacteriological examination. The results showed that 127 were highly satisfactory and 2 were unsatisfactory because of the presence of coliform organisms including faecal coli.

Samples of water supplies from artesian wells

During the year 65 samples of water were obtained from privately owned artesian wells in food manufacturing premises, for bacteriological examination. 62 of the samples were highly satisfactory and the remaining 3 samples were unsatisfactory because of the presence of coliform organisms. When unsatisfactory reports were received, a member of the food inspection staff visited the premises concerned to investigate the source of pollution.

The following is the result of a chemical analysis of the water supplied to consumers within the City area. The sample was collected in December, 1962:—

Appearance		Faintly cloudy. Slightly greenish-yellow colour.
Taste		. . . . .
Odour		normal
Reaction		pH 6.0
		Parts per 100,000
Total solid matter in solution		6.0
Total hardness		3.0
(a) Temporary	1.0	
(b) permanent	2.0	
Chlorine as chloride		1.4
Nitrogen as nitrate		0.02
Nitrogen as nitrite		absent
Saline ammonia		0.005
Organic ammonia		0.0025
Oxygen absorbed from permanganate, 4 hours at 27 °C.		0.165
Lead and copper		absent
Iron		0.008
Fluoride (F)		0.2 p.p.m.
Microscopical examination of the suspended matters		a small amount of suspended matter; vegetable fibres and organic debris; mineral matter.

Remarks:—A very soft and slightly acid water of good organic quality. Appearance is satisfactory and colour low. Only a trace of fluoride is present.

Samples of domestic water supplies from private wells, etc.

There still remains a number of dwelling houses in the City which are without a piped supply of water laid on. 43 occupied houses, usually isolated cottages on the outskirts of the City, still have to use water drawn from shallow wells for all domestic purposes, as the public mains supply has not yet been extended to them. During the year 244 samples of water were taken from private wells by District Public Health Inspectors for bacteriological examination. The results showed that 64 of these samples were highly satisfactory, 5 satisfactory, 4 suspicious, and 171 unsatisfactory because of the presence of coliform organisms of faecal and non-faecal origin in the water. When unsatisfactory results were reported, the householders concerned were advised by letter on practical methods of treatment to make the water safe for human consumption.

The results of examination of samples of water which were not highly satisfactory are as follows:

TABLE B 3

Coliform organisms (Count per 100 ml.)	Number of samples	Coliform organisms of faecal origin (Count per 100 ml.)	Number of samples
1—3	38	1—3	40
4—10	26	4—10	24
Greater than 10	116	Greater than 10	108

172 samples contained both faecal and non-faecal coli.

Legislation permitting the addition of fluoride to water supplies may be introduced in Northern Ireland following the publication of a report on fluoridation and dental decay among children. The Ministry of Health and Local Government are giving the report very careful consideration. After a five-year study of the effects of fluoridation on children's teeth the Dental and Medical Standing Advisory Committee has told the Imperial Minister of Health that no other method of preventing decay had yet been shown to be as effective. The Minister of Health and Local Government proposes, in consultation with health authorities and water undertakings to explore the practical, legal and other implications before considering the introduction of legislation to allow fluoridation of public supplies. The cost of fluoridation of a public water supply, based on studies in Great Britain, is approximately 10d. per year, per head of the population. Recent chemical analysis of water supplied to the Belfast area showed only a trace of fluoride present.

PUBLIC SWIMMING BATHS

Public swimming baths, both indoor and outdoor, are another municipal activity of interest from the public health point of view. To-day the water in the average pool is clear and bacteriologically pure, and this is due to the great advances which have been made in the design of bathing establishments, so as to ensure that pollution cannot enter the pool, that the water is adequately filtered, and that there is efficient sterilization. Chlorine is now the most widely used sterilizing agent and breakpoint chlorination is now extensively used with satisfactory results.

No matter how modern the equipment may be, there will still be some danger unless there is qualified and constant supervision. Fortunately this supervision is general in the City's public baths, and bathers need have little fear of infection if they themselves take precautions to ensure personal cleanliness before they enter the pool. A pond should not be allowed to become uncomfortably overcrowded, nor should the bathing load be so great as to cause the clarity, the bacterial content and the chlorine residual of the water to become unsatisfactory. In order to safeguard public health and to control the bathing load, the Medical Officer of Health recommended certain working conditions which included restriction of hours of opening the ponds to the public, limitation of numbers of bathers and extended operation of the filtration and chlorination plants after closing hours with a longer "quiescent" period.

Work on the City's largest swimming pool, the £500,000 Grove Baths, was nearing completion at the end of the year, and it is expected that the entire building will be ready for use at the beginning of the 1963 summer.

The major pool, which is 110 feet long and 42 feet wide, is almost finished and the final work on the dressing rooms is well advanced. The minor pool in the building is 75 feet long and 36 feet wide and has been designed with children in mind. The major concreting work has been finished and detailed work is well under way. The blue and white major pool will rank with the best in the British Isles and will attract swimming galas to Belfast which were not before possible. Overlooked by a modern cafe, it will have underwater lighting behind glass panels which can be used as observation windows. Supports for the diving boards are in place and seating accommodation for 824 spectators has been installed. The pool slopes from three feet at the shallow end to twelve and a half feet below the five-metre diving board. Bathrooms are provided for people who have not these facilities in their own homes, and baths have already been installed.

The baths at York Road were first planned 30 years ago and are the first to be built in the City for 64 years, but the swimming pools at three of the public baths have undergone extensive modernisation within recent years. The fourth, which is situated within a re-development area, will be re-built on modern lines to meet present day requirements.

There are five indoor swimming baths in use in the City. The four public baths are operated by the Health (Baths) Committee of the Corporation, at Templemore Avenue, Ormeau Avenue, Falls Road and Peters Hill. Each is provided with major and minor swimming pools and private baths. The fifth bath owned by a private school has one pond.

Table B4 gives particulars of each of the indoor ponds and private baths provided:—

TABLE B 4

Situation	Pool	Dimensions	Capacity in gallons	Method of treatment	Frequency of water circulation and filtration	Number of private baths provided
Templemore Avenue	Major	75′ x 24′ x 3′ to 6′ 6″	55,800	Filtration and continuous chlorination	Three hourly	45
,,	Minor	55′ x 24′ x 3′ to 6′ 6″	39,710	do.	do.	—
Ormeau Avenue	Major	55′ x 24′ x 3′ to 6′ 6″	39,710	do.	do.	36
,,	Minor	55′ x 24′ x 3′ to 6′ 6″	39,710	do.	do.	—
Falls Road	Major	66′ x 24′ x 3′ to 6′ 6″	50,000	do.	do.	43
,,	Minor	66′ x 24′ x 3′ to 6′ 6″	50,000	do.	do.	—
Peters Hill	Major	51′–8″ x 26′–3″ x 3′ to 7′	42,382	Chloros added by hand	Emptied and refilled twice weekly	46
,,	Minor	36′–6″ x 19′–6″ x 3′ to 6′	19,678	do.	do.	—
Private School	—	60′ x 20′ x 3′ to 5′–6″	36,000	Filtration and continuous chlorination	Three and a half hourly	—

The source of water for filling the ponds is the city mains in all cases.

All swimming baths are visited frequently by the district public health inspectors, special attention being paid during the summer months when bathing is heavy. During the year 780 visits were made and, in the course of inspection a chlorine test was made of the water in each pond using a Lovibond Comparator, also the pH value of the water was checked. 612 of these tests were made; 23 showed low pH readings and action was taken to remedy the deficiencies. In addition, 168 samples were taken for bacteriological examination. 165 of these samples were reported highly satisfactory and 3 samples as unsatisfactory because of the presence of coliform organisms including faecal coli. Structural defects discovered at the time of inspection were reported to the Baths General Manager.

Privately Owned Swimming Baths

24 samples of bath water were obtained for bacteriological examination from a private swimming bath. 23 of these samples were reported as highly satisfactory, 1 sample was unsatisfactory because of the presence of coliform organisms including faecal coli. During the year 66 tests were made by the District Public Health Inspector to check the amount of chlorine present and the pH value of the water. 3 samples showed low pH value. Structural defects observed at the time of inspection were reported to the superintendent of the baths.

Open Air Swimming Pools

Atmospheric pollution may be a source of nuisance in open air swimming pools. A film of dust and soot may collect on the surface, and a deposit may form on the bottom of the pool, especially in areas near industrial establishments. Another source of contamination of the water may be dirt carried on the shoes of spectators who have access to the concrete area which surrounds the pools: although this area may be drained, some of the dirt is taken into the water on the bathers' feet. Pollution of this nature can be prevented by the erection of barrier rails some distance from the edge of the pool.

Open air swimming baths under the control of the Corporation's Parks and Cemeteries Department were open to the public during the summer months. The Central Laboratory continued to provide an advisory service to ensure a consistently high standard for the swimming pond water. The samples taken from the pools were subjected to bacteriological examination, pH determination and tests for average chlorine content. In spite of the higher rate of patronage of the pools the results of examination were consistently good.

Table B5 gives particulars of each of the open air pools:—

TABLE B 5

Situation	Dimensions	Capacity in gallons	Source of water for filling	Method of treatment	Freguency of water changing
Victoria Park (Public)	136′ x 60′ to 26′ x 2′ to 6′	175,000 Settling tank 10,600	Connswater River	Filtration and continuous chlorination	Eight hourly
Falls Park (Public)	180′ x 156′ x 2′ to 4′ and 2′ to 6′	650,000	The Black Mountain Stream	do.	Five and a half hourly
Pirrie Park (Private)	100′ x 30′ x 3′ to 9′	100,000	City Mains	do.	Six hourly
Campbell College (Private)	120′ x 40′ x 3′ to 6′ 6″	145,000	do.	Improvised filtration liquid chloros added by hand	Eight hourly

Corporation Open Air Swimming Pools

During the season 120 visits were made by the district public health inspectors, and in the course of inspection a test was made of the water in the pool to ascertain the amount of chlorine present and the pH value of the water was also checked. 76 of these tests were made and one showed a low pH reading. In addition 44 samples were taken for bacteriological examination. All the samples were reported as highly satisfactory.

Privately-owned Open Air Swimming Pools

During the season 87 visits were made by the district public health inspectors, and during the inspection a test was made of the water in the pool to ascertain the amount of chlorine present and the pH value of the water was also checked. 53 of these tests were made and 20 showed low pH readings. Immediate action was taken in each case to remedy the deficiencies. In addition 34 samples were taken for bacteriological examination and of these 26 were highly satisfactory, 1 sample unsatisfactory because of the presence of coliform organisms including faecal coli and 7 samples low in pH value. The Department took effective measures to remedy the reported deficiencies.

HOUSING ACTS (NORTHERN IRELAND) 1890 to 1961

While there is a housing problem in Belfast it has become less acute than in the immediate post-war years due to the continued efforts of the Government, the local authority and private enterprise. It should be realized that Belfast is responsible for by far the larger part of the industrial production of Northern Ireland and immigration from the surrounding countryside, together with a general improvement in economic conditions, have been factors contributing to the housing shortage. At one period the homeless waiting list had reached a figure of 22,000 applicants, but this has now been reduced to 7,400 and with the building organisation which the Corporation has set up, this could be liquidated fairly quickly if sites were available. Shortage of sites, however, has been the chief obstacle to building in the City and very shortly those few that remain will have been developed. At present the Corporation is giving close consideration to the possibility of building on sites outside the boundary where this would not impose heavy transport expense on the tenants concerned. This is important as it is pointless to keep rents at reasonable levels on the one hand by means of subsidy and on the other involve the tenant and his family in a substantial bill for transport costs.

The Corporation have housed 8,500 families in the post-war period and is engaged in the provision of another 2,500 houses on land inside the boundary. In addition to this number almost 9,000 houses have been erected on sites outside the boundary, but still convenient to the City, by the Northern Ireland Housing Trust, which is a public body created by the Government to build throughout the Province. All the above houses are let to persons in need of accommodation at rents which average 27/- approximately per week for a three bedroom type house. It is possible to keep rents at these reasonable levels only by housing subsidies from public funds. Subsidies paid to house builders have contributed to a grand total of over 30,000 new houses built in the Belfast area since the war, and the continuance of these efforts should solve not only the housing shortage but also the back-log of slum clearance within a reasonable number of years, and create living conditions conducive to an efficient and contented labour force, which is important in any industrial area.

Along with the development of the few remaining estates and small sites within the City boundary, the Corporation have under consideration an ambitious slum clearance programme. A pilot scheme involving the clearance of some 1,300 sub-standard houses in one of the older parts of the City has been planned. These houses will be demolished and replaced by a mixed development of multi-storey point blocks and "slab" blocks of flats and maisonettes, together with two storey houses. It is intended by this means to rehouse as many of the exisitng residents as possible in the area and reduce as far as possible the problem of removing city dwellers to new surroundings in the surburbs, although some disturbance is inevitable, particularly at the commencement of the scheme. Such a programme is dependent upon new estates being available for displaced tenants, and as larger tracts of land become available to the Corporation it will be possible to step up the rate of clearing the slums. There are many large scale development schemes to tackle; all of them are urgent and the Corporation has considered the possibility of having several schemes under way at the same time. Many old people are living in unsuitable conditions; many families are still without houses; many are overcrowded and far too many are living in houses which should no longer be used at all. To rehouse such families is the main task ahead and perhaps a turning point has been reached in the building programme. By using mixed development it is possible to get many more dwellings into a given area without crowding them together. This type of development is likely to play an increasing part in city schemes and the Ministry's new subsidy for high flats should go a long way towards bridging the cost gap between ordinary housing and high flats.

Returns made by the Corporation to the Ministry of Health some time ago contained proposals for dealing with unfit houses within the City which were required under the 1956 Housing Act. There are approximately 30 possible redevelopment areas to be dealt with. During the year the Housing Committee authorised an initial survey of five proposed redevelopment areas: this brings the present number of areas in the City under active consideration to eight. This decision was a further step towards progress in the Corporation's slum clearance programme both from the point of view of dealing with the worst areas of bad housing and, at the same time, making an important contribution to the over-all plan for the improvement of the road system. The sites are:—(1) The area between Great George's Street, Whitla Street, Corporation Street and York Street. (2) The area between the upper portion of York Street, Great George's Street, North Queen Street and Henry Street. (3) The area bounded by Albert Street, Cullingtree Road and Divis Street. (4) The area between Cromac Street, Annette Street, Turnley Street, Stewart Street, Eliza Street, Welsh Street, Bond Street and Riley's Place, and (5) The area bounded by Mount Street, Shamrock Street, Ravenhill Road, George's Lane East and Clermont Lane. Already announced have been schemes for the Upper Library Street area; an area stretching from North Boundary Street to Malvern Street and an area at Artillery Street. On 23rd January, 1963, the Housing Committee decided to proceed with the Artillery Street area as redevelopment scheme No. 2.

The Housing Act (N.I.) 1961 provides for financial assistance to occupiers if they have to leave their houses in consequence of the local authority carrying out any of the following schemes under the Housing Acts (N.I.) 1890 to 1956:—(a) an improvement scheme; (b) a housing scheme; (c) demolition of an obstructive building; (d) a reconstruction scheme; (e) a demolition or closing order for an individual dwelling house or an undertaking accepted by the local authority and (f) a redevelopment scheme. A condition for a grant is that the person dispossessed of his home had been residing in that house for not less than six months. The maximum amount of grant is sixty pounds, to be applied, at the discretion of the local authority, towards, for example (1) the cost of removal; (2) the cost of furnishings such as window blinds, curtains, floor coverings, etc., (3) towards the purchase price of another house if the person dispossessed decides to buy one; (4) the difference of rent for a time if a new dwelling is rented. Evidence of expenses incurred has to be produced to the local authority when making applications for grant, as soon as possible after removal to another house.

Belfast's skyline is beginning to take on a new shape as the growth of the multi-storey flats makes inroads on the field heretofore occupied by the traditional two-storey dwelling house. This departure from traditional low-level development is a symptom of the growing problem of land scarcity in modern society. The first block of multi-storey flats to be built by the Corporation was completed and open during the year. This 13 storey block is one of 6 comprising the Carlisle Development scheme, formerly the site of the old Victoria Barracks. Also to be provided on the site are 54 three-bedroom four-storey maisonettes, 32 two-bedroom two-storey houses and 16 old people's dwellings (one bedroom). Each of the six multi-storey blocks contains 50 flats, giving a total of 402 dwellings on the site. The cost of works already started is £490,000. The site was acquired for housing development in April, 1958. The accommodation in each block has been planned to provide 4 two-bedroom flats on each of the 12 upper floors and 2 flats at the ground floor level. At each level the flats are arranged on each side of a central hall which contains lifts, the staircase and other utility services. Each flat contains entrance hall, living room with a large private balcony, kitchen, two bedrooms each large enough to accommodate two persons, bathroom and separate water closet accommodation. The kitchen is well-equipped with built-in cupboards. Recess space has been provided for a gas cooker, washboiler and refrigerator. The bathroom and water closet of each flat have been planned internally and will be mechanically ventilated. The living room and entrance hall of the flats are heated by electric underfloor panels and domestic hot water comes from individual electricity in each flat. Each block is served by two automatic passenger lifts arranged to stop at alternate floors. Clothes drying facilities have been provided at each floor level by means of drying areas ventilated to the open air.

Plans have been made to build two multi-storey blocks of flats, one with eleven floors, the other with thirteen, providing 138 units, at Mount Vernon Estate extension on the Shore Road. This is the first time a negotiated package deal has been agreed (the flats will be ready for occupation in about 2 years) and the contractor will produce a plan and specification within a broad outline given by the Corporation.

The Housing Committee discussed the condition of certain property at Lonsdale Street with particular reference to its close proximity to the new Corporation development in that area and instructed their officers to investigate the possibility of acquiring and replacing it by suitable new housing development. The Committee were subsequently informed that if the property were acquired and the land cleared 36 flats or 25 two-storey houses could be built thereon but the report showed that 44 families would require to be re-housed. As the area in question, however, only formed a very small part of a proposed redevelopment area it was suggested that the matter be discussed with the officers of the Ministry of Health with a view to determining the most suitable method of clearing the area and carrying out the proposed redevelopment. It was finally decided that it would be better to treat the area as a redevelopment scheme extending from Lonsdale Street to Fairview Street.

During the year the Estates Committee considered the demolition and removal of the temporary prefabricated bungalows erected in the City, but decided, because of the housing shortage and the good condition of the bungalows, that no action be taken meantime.

In April the City Architect reported to the Housing Committee that in accordance with their instructions, he had contacted the Northern Ireland Housing Trust and suggested that they might assist the Corporation by undertaking the development of the Glencairn Estate and also the redevelopment of an area within the City in accordance with the Corporation's slum clearance programme. The Trust stated that in view of the building programme already being undertaken by them in the Belfast area for housing for general need they should use all their resources available for this type of development to assist smaller local authorities and could not, therefore, undertake to develop the Glencairn site. The Trust would, however, assist the Corporation in slum clearance in accordance with the provisions of the Housing Act, 1961, but, if such arrangement were made, the Trust would wish to become owners of the site and design and carry out the scheme. The Committee agreed that further discussions should take place on the Trust's offer to carry out redevelopment within the City. This matter was still under consideration by the Corporation at the end of the year.

During the year a second public enquiry was held by Ministry of Health Inspectors into the Belfast Corporation's application for a vesting order for its slum clearance scheme in Upper Library Street area, (which embraces about 30 streets) as a result of 660 objections lodged by interested parties. The Corporation hoped, subject to certain contingencies, to be able to acquire vacant possession of the last house in the entire area in about 5 years after the operation of the vesting order and to complete the entire project in about 7 years from the date when the vesting order would become operative. A previous enquiry was held in 1960, when the Corporation represented all the dwellings in the area as unfit for human habitation: the Ministry, however, in its report after the enquiry did not wholly concur with the Corporation's findings and expressed the view that a specific number of houses were fit. The Ministry also recommended that there should be certain adjustments in the development, e.g., a reduction in the number of dwelling units with accommodation for one or two persons and an increase in the accommodation for families of larger size. The Corporation considered these recommendations and modified the development scheme to conform with the views of the Ministry.

The Corporation proceeded to acquire the land compulsorily because of the complexity of the area and the great delay which would arise from attempts to acquire the many interests by negotiated purchase.

At present there are 1,318 dwelling units in the area. The Corporation's original re-planning scheme provided for 1,022 dwelling units. In view of the Ministry's recommendations the Corporation subsequently proposed that there should be 922 units, a reduction of 100 from the originaly scheme. The construction of larger houses would mean fewer housing units, but more accommodation for larger families. These would accommodate 3,434 persons as against the original 3,497. One of the original fifteen storey blocks of flats has been eliminated. It is still the Corporation's intention to carry out the redevelopment scheme in eight stages. A reasonable target, with Housing Trust assistance, would be to re-house 300 families per annum. As work proceeds it will be possible to get a clearer picture of how and when the various stages will be dealt with but in the meantime the programme for the various states of clearance and redevelopment remains as outlined in the Annual Report of 1960. The Corporation intend at a later date to carry out another redevelopment scheme to the west side of the present area and to link both areas together.

In December, 1962, the Ministry of Health and Local Government made the order vesting the property in the Upper Library Street area in the Corporation and demolition work should commence early in 1963. The order includes all the lands bounded by Regent Street on the North, by Upper Library Street on the East, by Peters Hill on the South and by North Boundary Street and Denmark Street on the West, and includes Alton Street, Antrim Street, Arnon Street, Broadbent Street, California Street, Carrick Hill Place, Cavour Street, Christopher Street, Concord Street, Dagmar Street, Hanover Street, Hartley Street, Israel Street, Kildare Street, Lime Street, Lower California Street, Lower Regent Street, Old Lodge Road, Park Street, Riversdale Street, Sherbrook Street, Stanhope Street, Sydney Street, Trinity Street, Tyrone Street, Unity Street, Upper Townsend Street, Upton Street, Wall Street and Woodford Street.

The City Architect revised the layout of the eastern section of the redevelopment scheme, i.e., the area lying between the new through road and Upper Library Street. This will now be developed on the basis of a more accurate survey of the area. Arising from the detailed planning the Health (Baths) Committee agreed that the site for the Peter's Hill Baths, when reconstructed, should be repositioned a short distance from the present site at the intersection of Peter's Hill and the proposed through road. This will not only provide a larger site but will make it possible to arrange for the shopping precinct, shown on the original plan as approached from Upper Library Street, to be re-arranged so as to be approached from Peter's Hill. The Ministry of Health have indicated that the proposed re-arrangement would constitute a permitted modification of the scheme within the meaning of the 1956 Housing Act. The Housing Committee instructed the Estates Superintendent to rehouse the occupants of the houses involved as soon as practicable. It was also agreed to ask the Estates and Markets Committee to co-operate in dealing with the question of rehousing persons displaced by slum clearance measures generally by means of transfers, re-lets, etc., where suitable.

The Housing Committee discussed the fact that houses were still changing hands in areas proposed for slum clearance without proper enquiries being made, despite the statement made by the Minister of Health on 30th October, 1958, advising all intending purchasers to make enquiries before entering into contracts for the purchase of property. The Town Solicitor reported on this subject generally. He reviewed the present position and suggested that the Committee might wish to suggest to the Ministry that suitable legislation be introduced to protect purchasers of property in slum clearance areas. The Ministry stated that they were concerned that the problem existed, had the matter under active consideration and hoped soon to be in a position to put forward legislation to deal with it. During the year 1,175 enquiries relating to slum clearance schemes were received and answered by the Health Department.

An arrangement was made between the Corporation and the Housing Trust whereby the Trust will build houses on the Corporation's behalf on Trust sites where possible on or near the perimeter of the City and within reasonable distance from public transport and house applicants on the Corporation's lists. The Corporation will pay to the Ministry of Health and Local Government the appropriate rate of subsidy, if the following requirements are satisfied:—

(a) Applicants at least one year on the Corporations waiting list.

(b) Applicants who have resided in Belfast for at least 3 years and are British subjects.

(c) Homeless applicants.

(d) Applicants residing in Belfast whose home is being demolished for slum clearance, road widening, or condemnation.

The number of applicants on the Corporation's list housed by the Trust under the scheme during 1962 was 46.

A field of property investment in Belfast which has shown remarkable expansion over the past two years is the conversion of old houses into flats. Estate agents handling such development have found that the prices of the older larger houses, suitable for conversion to flats, have increased to many times their original purchase value. Unsuitable as single dwelling units for economic reasons, many of the bigger terrace and detached houses are proving sound investments for the landlord willing to meet the high initial cost of conversion. An approximate figure for conversion is £1,000 per flat. The final cost, however, will always depend on the condition and layout of the house before conversion starts, and many buildings now laid out in modern flats seemed almost useless when first taken over. The cost can be met in part in many cases by a conversion grant from the Belfast Corporation, but the living accommodation provided by conversion must be of high standard before it qualifies for this. Accommodation provided by this trend of development is usually of the highest standard in most cases and is providing homes in good residential districts.

The total number of permanent dwelling houses completed and occupied within the City during the year was 927. In addition 243 self-contained flats and 34 maisonettes were provided. 474 dwelling houses, 157 flats and 34 maisonettes were provided by the Corporation and 453 dwelling houses and 86 flats were provided by private enterprise. Table 6 shows the sites with the number of dwelling houses, flats and maisonettes erected by the Corporation and Table 7 the number of dwelling houses and flats erected by private enterprise:—

TABLE B 6

Site	Dwelling houses	Flats	Maisonettes	Old peoples' dwellings
Turf Lodge	321	—	6	13
Carlow Street	—	18	—	—
West Circular Road	30	46	—	—
Fortwilliam Parade	—	36	—	—
St. Leonard's Street	12	—	—	—
Carlisle Street	—	7	28	—
Hogarth Street/Ruth Street	45	—	—	—
Haig Street/Kingswood Street	13	—	—	—
Ballysillan	24	—	—	—
Mountcollyer Street	16	—	—	—
Carlisle Development	—	50	—	—
Totals	461	157	34	13

TABLE B 7

Divisions	Dwelling houses	Flats
North	42	17
South	103	40
East	177	29
West	130	—
Central	1	—
Totals	453	86

Single dwelling houses converted into flats with approval of the Local Authority:—

TABLE B 8

Dwelling Units	Divisions					Totals
	North	South	East	West	Central	
Houses	7	12	9	—	—	28
Flats	17	40	29	—	—	86

Table 9 shows the sites and capacity where contracts have been placed by the Corporation for the building of dwelling houses and flats:—

TABLE B 9

Site	Capacity	Contracts placed	Number completed			Number to be completed		
			Houses	Flats	Old persons' dwellings	Houses	Flats	Old persons' dwellings
Turf Lodge	637	637	480	6	12	132	—	7
Turf Lodge Extension	390	104	—	—	—	104	—	—
West Circular Road	119	119	61	56	—	2	—	—
Mount Vernon	252	34	—	—	—	—	—	—
Carlisle Development	394	132	—	50	—	32	50	—
York Street/Hanna St.	11	11	—	—	—	—	—	—
Hogarth Street	56	56	45	—	—	11	—	—
New Barnsley Extension	384	177	—	—	—	—	—	—
Bawnmore/Whitewell Road	18	18	—	—	—	—	—	—
Edenvale Addition	9	9	—	—	—	—	—	—
Ardgowan Street	49	49	—	—	—	—	—	—
Totals	2,283	1,346	586	112	12	281	50	7

At 31st December, 1962, the total number of dwelling houses and flats provided and owned by the Corporation since the commencement of local authority housing schemes was 12,518:—

Permanent houses built and purchased prior to 1939	3,016
Permanent houses built under the Belfast Improvement Order 1910 ..	250
Permanent houses built from 1946 to 1962	6,520
Permanent flats built from 1946 to 1962	1,741
Temporary (prefabricated) bungalows	991
Corporation houses demolished or closed as unfit for human habitation in 1962	6

Inspections and the procedural work for the clearance and redevelopment of areas of unfit houses and for essential repairs to secure wind and weatherproof conditions in large numbers of unfit and sub-standard houses, continued during the year as a major part of the Department's responsibilities. Table 10 shows the number of inspections carried out under the Housing Acts in each of the four divisions of the City:—

TABLE B 10

Divisions				Total
North	South	East	West	
2,091	162	1,635	1,478	5,366

15 individual houses were represented to the Housing Committee as being unfit for human habitation and not capable at a reasonable expense of being rendered so fit. 21 reports were prepared at the request of the Estates Department and the Northern Ireland Housing Trust for houses which were considered to be unfit in accordance with Section 33, Housing Act (N.I.) 1956. All the dwellings were within potential clearance areas. 6 Corporation owned dwellings were considered to be unfit due to their state of dilapidation: 3 were closed and 3 demolished. 19 dwelling houses were considered to be in a dangerous condition and the necessary action was taken by the Corporation to have these demolished: of this number 12 were demolished at the end of the year.

During the year 655 enquiries were made to the Health Department concerning properties in the City to ascertain if there were any proceedings pending in respect of public health matters or slum clearance action.

Houses let in Lodgings

The condition of housing accommodation forms a large part of the work of the Public Health Inspectors and in recent years, in accordance with the requirements of the Government of Northern Ireland, a great deal of attention has been paid to the clearance of unfit houses. The duties to be carried out under the Housing Acts (N.I.) 1890 to 1961, include many associated problems such as the closure of unfit dwellings and the reconditioning of properties which have a further useful life. One of the problems now facing the local authority is the condition of what has been termed "twilight" areas. These are areas of old and out-dated houses, usually badly run-down and generally having a shabby and squalid air. Often, because of their conditions, arrangement or setting, they are incapable of, or not worth, improvement. In many cases, they include large houses now occupied by several families (a use which was not intended when they were built) without, however, providing adequate facilities for decent family living. Often they are badly overcrowded and lacking almost entirely in convenience, comfort and privacy.

Though there is less overcrowding than formerly, bad pockets remain here and there. These are the black spots of the "twilight" areas. They are the first priority after the worst slums have been dealt with. Areas of this kind are to be found in the City and cause many problems. Not the least of these is how best to establish satisfactory living conditions in the larger houses which, although originally built to accommodate one family, are now occupied by several. This change was bound to occur because this type of house is far too large for a single family today. The process has usually been hastened by a general deterioration of the standard of the district. The trouble is that little has been done to ensure that the houses are properly adapted for this change in their use.

At a meeting of the Improvement Committee the City Surveyor referred to Section 19 of the Belfast Corporation (General Powers) Act (N.I.) 1961, which provides that dwelling houses shall not be converted into or used as more than one dwelling without the consent of the Corporation (subject to a right of appeal, against refusal of consent, to the Ministry of Health and Local Government). Any person contravening these provisions is liable to a penalty not exceeding £10 and to a daily penalty not exceeding £5. The City Surveyor stated that at his request the Medical Officer of Health had prepared a list of premises being used as tenement dwellings without the consent of the Corporation since the passing of the Act. During the year 69 such houses were discovered by the Public Health Inspectors and reported to the City Surveyor for action in accordance with the above Act.

The undernoted figures give some indication of the work carried out by Public Health Inspectors and conditions found in known tenement dwellings during the year:—

Inspections	1,509
Sanitary defects discovered	97
Sanitary notices served on owners and occupiers	33
Sanitary defects remedied	85
Number of houses registered as at 31st December, 1962	172
Number of houses not registered but discovered to be used as tenements	69
Number of families in occupation	687
Number of rooms	970
Number of adults	1,152
Number of children	565
Number of samples of water taken for bacteriological examination ..	286

Rent and Mortgage Interest (Restrictions) Acts (Northern Ireland) 1920 to 1961

The purpose of control is the prevention of unreasonable increases in rent which might be caused by housing shortage. It limits the amount a landlord may legally recover from a tenant and at the same time gives security of tenure. It is clear that, under present conditions of acute shortage, rent control must continue.

One of the tasks imposed on the Health Authority under Part V of the Housing (Miscellaneous Provisions) and Rent Restriction Law (Amendment) Act (N.I.) 1956, is the operation of the "certificate procedure" relating to the condition of the house. The tenant may apply to the Health Authority for a certificate of disrepair at any time after a notice of increase of rent has been served on him. This will usually—but need not necessarily—be a notice about the latest repairs increase. The tenant of an "old control" house may apply for a certificate before receiving any notice about the latest repairs increase; such a certificate would entitle him to withold the increases under the Acts of 1920 and 1951. If the sanitary authority is satisfied that the house is not in a reasonable state of repair they may grant the tenant a certificate in the prescribed form. Where the landlord or tenant of a dwelling house is aggrieved by the issue by the sanitary authority of, or by failure to issue, any certificate, he may appeal to the county court who may make an Order which shall be final and conclusive.

The following table shows the number of applications received for certificates and reports issued and refused from 1st September, 1951 until 31st December, 1962:—

(a) During 1962:—

Certificates and reports outstanding at 1st January, 1962	5
Applications for certificates and reports	802
Certificates issued to tenants	464
Reports issued to landlords	145
Refusal of certificates to tenants	5
Refusal of reports to landlords	166
Applications for certificates and reports cancelled	17
Certificates and reports outstanding at 31st December, 1962	10

(b) Totals from 1st September, 1951 till 31st December, 1962:—

Applications for certificates and reports	42,039
Certificates and reports issued	36,327
Reports issued to landlords	7,222
Certificates issued to tenants	29,105
Reports refused	4,898
Certificates refused	512
Certificates and reports cancelled	292

Discretionary Points system for allocation of Housing Accommodation on Medical Grounds

In cases where claims for rehousing are made on medical grounds, concerning overcrowding or insanitary conditions, the Estates Superintendent transmits the particulars and medical certificates to the Medical Officer of Health for scrutiny and assessment. In each case it is necessary to obtain an accurate assessment of the housing conditions. For this purpose a Public Health Inspector visits the premises and ascertains the accommodation occupied, the number, ages and sex of the occupants, details of living accommodation and sleeping arrangements and the presence of remediable or irremediable sanitary defects. He also enquires regarding such "inconveniences" as multiple occupation, shared accommodation, lack of privacy, etc. In cases where there are unsatisfactory living conditions e.g., overcrowding or insanitary conditions, the question arises if the sanitary or other defects are irremediable under the Public Health or Local Acts. If so, the case qualifies for an award under the Corporation's existing points system.

If, in addition to unsatisfactory living conditions, ill-health is given as a reason for rehousing, it is essential to have accurate information as to the precise condition and resulting disability from which the patient is suffering before any assessment can be made.

During the year 209 applications were received for priority under the discretionary points system for allocation of housing accommodation on medical grounds. These came from hospitals and doctors. These cases were concerned with infirmity and various medical disabilities such as nervous and mental disorders, rheumatism, heart disease, respiratory infections, etc.

Dwelling houses inspected for over-crowding or insanitary conditions	209
Rooms in dwelling houses inspected	827
Families occupying the dwelling houses	402
Adults	1,068
Children	527
Houses found to be overcrowded	106
Houses found to be in an insanitary condition	48
Applications where no recommendations were made	55

Planning Acts (Northern Ireland) 1931 and 1944
and
Planning (General Interim Development) Order (Northern Ireland) 1944

During the year 56 applications and enquiries were received from the City Surveyor's Town Planning Section, concerning proposed development of various properties in the City such as the conversion of dwelling houses to shops, second hand clothes dealers, hairdressing, cafes and snack bars, showrooms, home bakery, preparation, storage and sale of foodstuffs, betting premises and other premises proposed to be used as factories, etc. In 16 instances the Health Department recommended disapproval of development on the grounds that public health nuisances were likely to arise in surrounding dwellings owing to their close proximity to the proposed development, and also that the conversion of good type dwelling houses into business premises would further aggravate the City's housing shortage. 17 applications for development were recommended for approval and a further 23 were provisionally recommended subject to certain work being done to comply with the Public Health Acts (N.I.) 1878 to 1962, Shops Act (N.I.) 1946, Factory Acts (N.I.) 1938 to 1961, Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948, and Belfast Corporation Acts, 1848 to 1961.

In addition to the above there were 3 instances where unsuitable businesses had been established and because of the structural condition of the buildings and the high cost of putting them into compliance with public health legislation the premises were voluntarily vacated.

During the year evidence was prepared by the Town Planning Officer and given at appeal hearings in connection with 89 planning applications refused by the Corporation. Of the 60 decisions released by the Ministry of Health and Local Government, the Corporation's decision was upheld in 43 cases, and special conditions were imposed in 9 others.

Improvement and Conversion Grants for Older Houses

On 1st April, 1957, Part 2 of the Housing (Miscellaneous Provisions) and Rent Restriction Law (Amendment) Act (N.I.) 1956 came into operation. The local authority may assist a private owner to modernise his house by making a grant for improvement or conversion. The local authority must, however, be satisfied that the dwelling as improved or converted will provide satisfactory housing accommodation for a period of not less than 30 years (save in special circumstances). To obtain a grant the authority must be satisfied that when the proposed work has been done the dwelling will:—

1. be in a good state of general repair and have walls and floors free from, and roofs impervious to, dampness;
2. have adequate natural lighting and ventilation;
3. have an adequate supply of wholesome drinking water readily available;
4. be provided with a suitable hot water circulating system;
5. have a bathroom fitted with a bath and wash-hand basin. A hot press and a water closet must also be provided and may be located in the bathroom. The apartments therefor must afford adequate space for access to and use of the fittings therein. The watercloset apartment must not communicate directly with a living room, bedroom or kitchen or the scullery accommodation;
6. be provided with a suitable sink and draining board in the kitchen or scullery accommodation;
7. have a drainage system suitable for the disposal of waste water and rain water and, where a water closet is installed, of soil therefrom;
8. be provided, where gas or electricity services are available, with sufficient points for the adequate lighting of each room, apartment or passage;
9. have accommodation for installation of gas, electric or solid fuel cooker;
10. be provided with a fireplace or some other fixed means of heating in the principal living room and in at least one of the principal bedrooms;
11. be provided with larder accommodation within the house, with a floor space of four square feet and a minimum height of six feet six inches with adequate shelving and effective permanent ventilation directly to the outside air;
12. have reasonable provision for the storage of fuel.

Applications for grants are dealt with by the City Surveyor and in each case he seeks the views of the Health Department as to the suitability of the premises for conversion, prior to the application being considered by the Housing (Clearance and Redevelopment) Committee.

Applications for improvement and conversion grants for older houses received during 1962	262
Applications refused or withdrawn	26
Applications approved	236

Table B11 shows the number of improvements completed during the year:—

TABLE B 11

Divisions					Total
North	South	East	West	Central	
7	12	31	18	1	69

Table B12 shows the number of conversions completed during the year:—

TABLE B 12

Conversion	Divisions					Totals
	North	South	East	West	Central	
Houses	7	12	9	—	—	28
Flats	17	40	29	—	—	86

During the year the Northern Ireland Minister of Health and Local Government stated that too little use was being made of the scheme for conversion and improvement of existing houses and suggested that it would be helped by greater encouragement by local authorities. In the first full year of the scheme the Corporation's Housing (Clearance and Redevelopment) Committee approved 181 applications for grants, but owners of property have not taken full advantage of the scheme. The scheme is not only a positive contribution to new housing, but it offers the opportunity to owners of old, sound houses to provide modern amenities. Comparable assistance in cross-channel cities has brought large benefits, in both directions, and it is clear that very much more could be achieved in Belfast to make the maximum use of our stock of large, under-used dwellings.

From the time when grants were first made in 1958 till the end of 1962 the Corporation paid out in improvement or conversion grants over £133,500 to which the Ministry of Health and Local Government contributed over £100,500.

Public Health nuisances discovered and complained of in dwelling houses, etc., during 1962

Every complaint of a sanitary nuisance received is investigated forthwith and appropriate action taken where a public health nuisance or defects are found. In many cases the attention of the person responsible is drawn to the existence of the nuisance and this is often the only notice necessary.

In other cases statutory notices are served and in cases of non-compliance summary action is necessary.

TABLE B 13

Nuisance	Divisions				Totals
	North	South	East	West	
Drains, traps, etc., foul or defective	916	624	787	859	3,186
Tiling, paving or flooring defective	612	728	870	856	3,066
Sinks defective, or want of; wastepipes foul or defective	133	153	158	100	544
Water closets foul or defective; no watercloset accommodation; soil or ventilation pipes defective or want of	974	976	1,055	969	3,944
Dustbins defective, or want of	219	66	67	100	452
Roofs defective	2,532	1,817	1,936	2,610	8,895
Spoutings defective, or want of	1,636	1,285	1,426	1,567	5,914
Damp state	3,530	2,628	2,900	3,683	12,741
Plaster on walls and ceilings defective	651	898	732	762	3,043
Domestic water supply; want of, or unsuitable	19	36	73	9	137
Lighting or ventilation insufficient, or want of	104	101	74	117	396
Schools overcrowded	1	—	—	—	1
Dwelling houses overcrowded	164	58	47	74	343
Accumulation of manure or offensive matter; offensive smells; premises or passages dirty	262	213	261	483	1,219
Fowl or animals kept so as to be a nuisance	9	—	2	—	11
Schools dirty or defective	11	6	10	8	35
Miscellaneous	1,295	1,622	1,854	1,580	6,351
Totals	13,068	11,181	12,252	13,777	50,278

Public health nuisances abated in dwelling houses, etc., during 1962

Nuisance abated	Divisions				Totals
	North	South	East	West	
House drains cleansed	445	368	363	319	1,495
House drains repaired and relaid	92	60	73	79	304
Houses had tiling, paving, flooring, etc., repaired	661	675	807	695	2,838
Houses had waterclosets cleansed or repaired	943	820	867	987	3,617
Number of dustbins provided	184	64	32	48	328
Houses provided with new sinks	—	—	—	—	—
Houses had roofs repaired	1,982	1,800	1,956	2,203	7,941
Houses had spouting repaired	1,567	1,262	1,438	1,356	5,623
Passages cleansed	8	4	1	8	21
Houses cleansed	1	10	—	5	16
Houses had minor repairs effected	1,246	1,968	1,598	1,156	5,968
Miscellaneous nuisances abated	1,122	281	428	936	2,767
	8,251	7,312	7,563	7,792	30,918
Length in yards of drain pipes laid	196	241	116	485	1,038
Gully and disconnecting traps provided	7	10	3	3	23

Summary for 1962 in connection with defects in dwelling houses

Complaints received and discovered	50,278
Inspections	115,909
Statutory notices issued	20,939
Sanitary improvements carried out	30,918
Summonses issued for non-compliance with notices	2,020
Court orders for the abatement of nuisances	201
Summonses for disobedience of magistrates' orders	35
Disobedience convictions	35
Amount of fines imposed by the courts	£600 19s. 0d.
Costs imposed by the courts	£132 7s. 6d.

Bye-Laws made under Section 23 of the Public Health Acts (Amendment) Act, 1890 (relating to keeping water closets supplied with sufficient water for flushing)

Where in any premises in the City in or upon which water closets are provided any such water closet is without a supply of water sufficient for flushing purposes, the Council may serve notice on the owner of the premises requiring him within not less than twenty-four hours to provide such sufficient supply of water. Failure to comply with a notice is an offence under the Bye-Laws. It is a good defence if the owner can show that (a) the supply was cut off because of the occupier's default in payment of the water rate, or (b) urgent repairs were being done which necessitated the cutting off of the water supply and such repairs were carried out and the water supply restored as soon as practicable.

Where failure to provide a sufficient supply of water is due to the cutting off of the supply by reason of the occupier's default in payment of the water rate, the notice is served on the occupier, and if he fails to comply with the notice he commits an offence under the Bye-Laws.

Inspections during the year	2,056
Notices issued under the Bye-Laws	1,028
Summonses issued for non-compliance with notices	92
Amount of fines imposed by the courts	£166 0s. 0d.
Costs imposed by the courts	£23 7s. 6d.

KEEPING OF ANIMALS

Stabling Yards

Stabling yards within the City were systematically inspected by Public Health Inspectors during the year, attention being paid to the frequency of removal of manure. General sanitation (including impervious paving of stables and yards) drainage, cleanliness and ventilation were enforced.

Action by the Department against the common house-fly continued throughout the season by treating of stables and manure pits with a solution of insecticide which was found to be very effective.

Number on register at 31st December, 1962	95
Inspections during the year	1,083
Number of treatments carried out by Pests Control Section in stables and cattle yards	249

Piggeries

At the end of the year no pigs were being kept within the City Boundary.

BURIAL GROUNDS AND CREMATORIUM

Number of burial grounds in city (six controlled by the Corporation)	10
Number of inspections during the year	106
Number of burials in Corporation-owned cemeteries	2,719

In March the Corporation commenced as an unemployment relief scheme the conversion of Shankill Graveyard into a Garden of Rest at an estimated cost of £13,514. All the headstones are being removed from the existing graves but some dating back to the early 17th century have been cleaned up and preserved along with examples of gravestones up to recent times. These are to be placed adjacent to the boundary walls in the new lay-out in an attempt to retain something of the atmosphere of the graveyard as it was. The new garden (a 3½ acre site) will be laid out in lawns and flower-beds and when completed it will be regarded as an old peoples' park.

Available ground in Dundonald Cemetery was exhausted eight years ago. Carnmoney Cemetery has been twice extended since its opening. Milltown Cemetery has also been considerably extended. The City Cemetery, which now accommodates 194,000 burials, is nearing its capacity of 200,000 and will be closed within a few years. Belfast's newest Cemetery at Roselawn covers 137 acres, of which 106 acres have been allocated for Cemetery purposes, providing for 75,000 grave spaces. It is expected that under normal conditions and with the increased use of the Crematorium the cemetery will meet the needs of the City for about 100 years. 704 burials took place in Roselawn Cemetery during the year.

The use of cremation is increasing and the latest figures issued by the Cremation Society show a growing preference in Britain for this method of disposal of remains. In 1938 there were 16,300 cremations in Britain, representing between two and four per cent of the number of recorded deaths. Since the war the number of cremations has increased at about two per cent a year and last year 204,000 people were cremated, a percentage of 34.7. The Cremation Society predicts that cremations will account for 50 per cent of the burials in Great Britain within the next 8 years. Including the one opened in Belfast last year there are 152 crematoria in the United Kingdom.

Belfast Crematorium

Dr. Stutt, Industrial Medical Officer, acts as Medical Referee, with the assistance of Dr. McLeod, a Senior Medical Officer of the Health Department. The number of cremations since the opening of the building in July, 1961, is:—

TABLE B 15

Year	Belfast residents	Residents from other places	Totals
1961	30	59	89
1962	92	114	206
			295

Under the terms of licences issued by the Ministry of Health and Local Government, Public Health Inspectors supervised the exhumation of the remains of twelve bodies during the year. Ten of the bodies exhumed were German Servicemen whose remains were removed from the City Cemetery, Belfast, for re-interment in Cannock Chase Cemetery, Staffordshire. Three bodies were re-interred including one exhumed in Prospect Cemetery, Glasnevin, Dublin, and re-interred in Belfast's Roselawn Cemetery. In each case the exhumation and re-interment was carried out expeditiously and without a nuisance.

BUILDINGS USED FOR PUBLIC ENTERTAINMENT

In cinemas and theatres the term "air-conditioning" has been used loosely to describe, for example, systems of mechanical ventilation and plenum heating. The expression should be used only to mean the complete control, within predetermined limits, of the temperature, humidity, cleanliness and movement of the air in a building. Control is desirable in order to maintain conditions conducive to the health and comfort of the occupants. The advances made during the last few years in control of atmospheric conditions in places of entertainment indicate that air-conditioning is likely to be accepted as a necessity for many of the larger type of cinemas envisaged in reconstruction plans.

Routine visits to cinemas, theatres and dance halls have continued during the year. Attention was given to the cleanliness of the auditoria, seats, sanitary conveniences, staff and projection rooms. Visits were made during the evening performances and at different seasons of the year in order to check the efficiency of the heating and ventilating systems and to ascertain if conditions were satisfactory for the health and comfort of the patrons.

Cinemas and Theatres

In 16 instances the test results recorded air conditions or heating below agreed standards. In 5 instances the cooling power as measured by the Kata Thermometer was too low, in 4 instances the rate of air movement was practically nil and in 7 instances the temperature was not satisfactory. Action was taken on representations to the managers concerned.

Extensive alterations and improvements were carried out in three cinemas, including the rearrangement and provision of new seating accommodation, improved ventilation, sanitary accommodation etc.

During the year 158 tests were carried out using the Kata Thermometer and Hygrometer. The number of readings recorded in these tests was 790.

Cinemas and Theatres in City	29
Inspections by Public Health Inspectors (including evening inspections)	499
Sanitary defects discovered	27
Sanitary defects remedied at end of year	25
Cinemas closed during the year	2

Dance Halls

There are 67 halls in the City licensed for public dancing, etc., in addition to approximately 160 premises where dancing, singing, music, boxing and other forms of entertainment are carried on. Admission to unlicensed halls is by membership card.

During the year 59 evening inspections were made and 52 air tests carried out. Insufficient ventilation and air movements were discovered in 14 tests made by the Kata Thermometer and Hygrometer. Occupiers of the dance halls concerned were requested to make improvements to the ventilating systems. Improvements were made in 12 buildings and 4 were still outstanding at the end of the year (See Table B16).

Extensive alterations and additions were made in two dance halls to include restaurant accommodation.

During the year three additional premises were found to be used for public entertainment.

Inspections (including evening inspections)	171
Defects discovered	60
Defects remedied	61
Kata Thermometer and Hygrometer readings	268

The following table is a summary of defective conditions found and remedied in licensed and private dance halls, etc., by Public Health Inspectors:—

TABLE B 16

Defects	Instances	Notices served	Remedied	Outstanding
Insufficient ventilation	14	14	12	4
Damp and defective conditions	2	2	3	—
Dirty conditions	6	3	6	1
Sanitary Conveniences:				
Not provided with proper intervening ventilated spaces	2	2	3	—
Not provided for each sex	3	2	3	2
Not properly screened	2	2	2	2
Not properly lighted	1	1	1	—
Not properly ventilated	5	4	5	1
In a dirty state	4	2	4	—
In a defective condition	3	2	3	1
Insufficient accommodation	3	3	2	2
Insufficient or defective urinal accommodation	3	3	3	1
Unsuitable washing facilities or want of	5	4	6	1
Other defects	7	5	8	2
Totals	60	49	61*	17

* Defects remedied include defects outstanding from previous year.

PUBLIC SANITARY CONVENIENCES

There are 142 public sanitary conveniences in the City. 84 are provided for males and 58 for females. It is the intention of the City Surveyor to demolish all old structures and replace with modern buildings. Proposed new conveniences have been planned for erection on sites at Donegall Road, Crown Entry, Carlisle Circus, Kent Street and Shore Road. During the year the City Surveyor reported that a vacant plot of land at the junction of Crumlin Road and Fleetwood Street would be a suitable site for the erection of a public male and female sanitary convenience for the Carlisle Circus shopping area. The cost of providing a surface convenience on this site was estimated at approximately £6,500. The Improvement Committee agreed that negotiations should commence for the acquisition of the land and that plans be prepared. The Ministry of Health approved in principle the provision of a public sanitary convenience at Crown Entry subject to personal washing facilities being provided. New sanitary conveniences are being created at the Sir Thomas and Lady Dixon Park and in Botanic Gardens Park at an estimated cost of £3,000 aech. At the end of the year a site investigation was in progress and plans were being prepared for a new Subway and Underground convenience at Donegall Square East. Public sanitary accommodation has been provided or is in the planning stage in connection with the following playing fields: Grand Parade, Victoria Park, Ballysillan, Orangefield, Connswater, Avoniel and Oldpark.

Inspections by Public Health Inspectors	2,533

TESTING OF DRAINAGE SYSTEMS

Tests using smoke and colouring materials are applied to drainage systems suspected of being defective and, where drains are found to be defective, the usual legal procedure is followed to secure the repair of the defective drain as soon as possible. Where defective public sewers are observed a report is made to the City Surveyor. Public Health Inspectors supervise the work of repair or reconstruction of all drains, soilpipes, etc. In the case of new or reconstructed drains, water tests are applied to ascertain that the drains are satisfactory.

During the year 899 drain tests were carried out by Public Health Inspectors. 668 tests were made as a result of complaints of the ingress of rats into buildings. 187 drains showed defects by smoke machine tests. Of this number, 129 had been tested by reason of complaint of rats and the remaining 58 because of complaints of offensive odours or other causes.

House drains completely re-laid	90
House drains repaired	304
Drain pipes, bends, traps, gullies, etc. used in repair of drains ..	1,061

PROVISION OF DUSTBINS

Under Section 44 of the Belfast Corporation Act, 1930, the Corporation may, by notice in writing, require the owner or occupier of any dwelling-house, warehouse or shop, from which the Corporation undertake, or may be required, to remove any house or trade refuse, to provide and maintain in good order and condition suitable dustbins for the convenient removal of such refuse.

Notices served under Section 44 Belfast Corporation Act 1930 ..	93
Summonses issued for non-compliance with notices	3
Dustbins provided during the year	328

MARINE STORES

The present legislation is found in the Public Health Acts Amendment Act, 1907, and the 1930 Bye-Laws with respect to offensive trades in rags, bones, etc. Marine Stores is the general term used to describe stores where various types of waste collection are carried on, including stores used by rag dealers and bone merchants, general dealers, waste merchants, metal merchants, etc. There are 62 persons licensed to carry on business as general dealer under the General Dealers (Ireland) Act, 1903. Most marine stores have ceased to collect bones and now confine business to the collection of rags, waste materials, scrap metal, etc. The majority of articles handled in marine stores are salvaged and again used: the materials are soiled, dirty, infested with insects and sometimes vermin: for this reason it is essential to carry out rigid inspection and treatment of premises with insecticides to reduce danger to public health to a minimum.

Inspections during the year	452
Defects discovered	55
Notices served under the Bye-Laws	34
Defects remedied	71

The periodical treatment of all rag stores to eradicate vermin continued throughout the year. The Pests Officers carried out 106 treatments and the cost was charged to the respective proprietors.

The following is a summary of defective conditions found and remedied in marine stores during 1962:—

TABLE B 17

Nature of defects	Instances	Notices served	Remedied	Outstanding
Walls in rooms not rendered vermin proof	2	2	3	1
Rooms not enclosed or provided with a proper roof or ceiling	1	1	1	—
Rooms not properly lighted	2	1	2	1
Rooms not properly ventilated	3	2	2	1
Rooms not provided with suitable floor	1	1	2	—
Materials stored so as to obstruct lighting or ventilation	2	1	2	—
Dustbins not provided or trade refuse not removed weekly	2	2	5	1
Premises not kept in a clean state	5	3	6	2
Walls, ceilings, partitions, etc., required redecoration	6	3	9	—
Premises, apparatus, utensils not kept in a state of repair	3	1	4	1
Yards, loading bays, etc., not properly surfaced	—	—	2	—
Other defects	6	5	9	1
Sanitary Conveniences				
Insufficient accommodation	2	2	2	—
Not provided with proper intervening ventilated space	2	1	2	—
Not provided for each sex	1	1	2	—
Not properly screened	2	1	2	—
Not properly lighted	3	1	2	1
Not properly ventilated	2	1	3	—
In a dirty state	4	2	4	1
In a defective condition	6	3	7	1
Totals	55	34	71*	11

* Defects remedied include defects outstanding from previous year.

OFFENSIVE TRADES

The offensive trades registered within the City comprise six hide and skin merchants, three fat melters, two bone boilers, three gut scrapers and three tripe cleaners and boilers, making a total of seventeen. Inspections showed that the provisions of the Bye-Laws requiring the prevention of offensive effluvia, the inoffensive disposal of obnoxious waste, the limewashing of walls, the cleansing of floors and utensils and the thorough flushing of drains were being generally observed. Action was taken under the Bye-Laws in every case where a nuisance was found to exist.

Inspections during the year	198
Breaches of Bye-Laws discovered and remedied	14

PRIMARY AND SECONDARY SCHOOL BUILDINGS

During the year the first classes moved into the new £750,000 Belfast Technical College extension at Millfield, but the building will not be in full use until 1963. The extension was to have been completed in May, 1962, but building delays upset the arrangements. Pressure on space at the main Technical College necessitated the partial move and at the end of the year 15 classrooms were in use in the main classroom block, while workmen were still putting the finishing touches to upper floors. About 200 students were attending classes in the new building at the end of December, but eventually it will accommodate 2,000—3,000 mechanical engineering students. The building has been designed in two units—the main classroom block fronting on Millfield, and the workshop block to the rear. Nearest the road is the gymnasium which replaces the gymnasium room in the main college building.

Work has begun on the new building for Graymount Open Air School and the temporary arrangements necessitating the use of the former Fortwilliam Primary School are working satisfactorily. Agreement has been reached with the Housing Committee on the siting of two nursery schools in the Carlisle housing scheme where there are to be large blocks of flats. It was thought that one of these nursery schools might have been incorporated in one of the multi-storey blocks but after consideration it was decided that a separate building would be more suitable and a modification of the layout has made this possible. The provision of these schools will not only meet the new needs but will offset the loss of the nearby Frederick Street Nursery School, which appears likely in the near future, as the property has been put on the market. In view of the anticipated development of the area in which it is situated, town planning approval could not be given to its continued use as a nursery school and the Education Committee abandoned its intention of buying the property to keep the nursery school going.

The site of the new Richmond Park Primary School is restricted: plans for this school are in preparation. Plans have been prepared for extensions to Memel Street temporary school since doubts about the future of this area make it unwise to build a permanent school. Workman Primary Infants School, with the reorganisation of the Sandy Row area, has been reduced in accommodation, and reconstruction has already taken place to provide a hall for the school in place of the surplus classrooms. To relieve overcrowding at Currie Junior School a nearby property in Mervue Street has been acquired and is to be adapted for use by infant classes until the main school can be extended, when two houses on the site will be removed to allow the building of additional classrooms. When this is done the property now acquired will become a nursery school. Getty Primary School ceased to be used as a separate primary school, but the premises will continue to be used as an annexe to Hemsworth Square Primary School until reorganisation of that school is possible, i.e., when Somerdale Boys Secondary School is ready for occupation. Ormeau Road Junior School closed at the end of 1961. Skegoniel Primary School occupied new premises in June and two new voluntary primary schools, St. Aidan's Boys and St. Bernadette's Girls opened in September. A start has been made on the building of a new primary school at Ballymurphy to replace the temporary school and to provide for the needs of the new houses.

Frequent visits are made by Public Health Inspectors to school buildings to observe the general standard of sanitation and cleanliness, also to inspect canteens and kitchens under the Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948. The standard of cleanliness was found satisfactory.

Nursery county schools	7
Nursery voluntary schools	1
County primary schools	69
Additional accommodation provided for primary schools:—	
(a) Premises rented for additional teaching space	7
(b) Premises rented for physical education	5
Voluntary primary schools under Roman Catholic Management	64
Schools for children requiring special educational treatment	25
Special county schools	8
Special voluntary schools	2
Voluntary secondary schools	24
County secondary schools	19
Registered independent schools	4
Provisionally registered independent schools	3
Inspections by Public Health Inspectors	1,143
Defects notified by School Health Services	8
Intimation notices concerning defects sent to:—	
(a) Director of Education or reported to Principal	33
(b) Managers of voluntary schools	27
Sanitary improvements effected	46

RIVERS POLLUTION PREVENTION ACTS, 1878-1893
URBAN DRAINAGE ACT (N.I.) 1957

Rivers in City	22
Inspections during the year	1,613
Nuisances discovered and abated	40
Samples of river water examined during the year	183

During the year the City Surveyor reported to the Improvement Committee that in view of flooding which had occurred in areas adjoining the Glenwood River, notably at Butler Street and Flax Street, and because of the generally unpleasant condition of the river bed he had prepared a scheme for the improvement of the river from Alliance Avenue to Butler Street. It was proposed to construct a concrete culvert of size varying from 7′ by 4′-3″ to 6′ by 4′-3″ along the length of the river together with such ancillary works as might be necessary. The Ministry of Agriculture was approached to ascertain if a scheme of this nature would come under the terms of the Urban Drainage Act (N.I.) 1957 and they authorised the preparation of a draft Urban Drainage Scheme. The estimated total cost for the proposed works was £45,000 and, on the assumption that a 50 per cent grant would be payable under the Act, the estimated nett cost to the Corporation would be £22,500.

The City Surveyor stated that this work was essential because of the incidence of flooding and the insanitary condition of the river and he was authorised to submit a draft Urban Drainage Scheme for the Glenwood River to the Ministry of Agriculture and, subject to the usual procedures and confirmation of the scheme, to invite tenders for the work. Consideration has also been given to the acquisition of the Highfield Dam at Flax Street adjoining the river but, because of certain water rights being involved, acquisition was deferred pending a full investigation into the water rights of the users of the dam. In the event of the dam being acquired the Director of Parks considered that, when filled in, it could be used as a children's playground and thus greatly enhance the amenities of the district. The Glenwood River scheme was subsequently approved by the Ministry of Agriculture.

The Blackstaff-Lagan culvert, which discharges flood water from the Bog Meadows direct to the River Lagan, was completed during the year. The Blackstaff River Improvement Scheme was introduced because of periodical flooding which occurred due to the overflow of the River in the Donegall Road area, and affected the centre of the City. Following the extensive flooding of August, 1952, and the subsequent detailed investigation by the City Surveyor, it was decided to construct a relief culvert which would discharge flood water direct to the Lagan. In 1956 Parliamentary powers were obtained to enable the Corporation to construct this culvert and acquire the greater part of the Bog Meadows, which by the carrying out of the scheme, will become available for development. The estimated cost of the scheme was approximately £1,250,000 (to which the Ministry of Finance contributed 50 per cent) and provided for the purchase of the Bog Meadows, the construction of the culvert, river improvement works and the construction of a temporary dam and sluice to help control the effect of minor storms which otherwise would cause flooding in developed areas. The route of the culvert is practically a straight line from the intake works to the River Lagan at Botanic Gardens Park, a length of approximately one and a quarter miles. Three quarters of a mile is constructed in tunnel at depths of as much as 60 feet below the surface. The finished internal diameter is 13 feet. Owing to the nature of the strata, excavation was carried out within a steel tunnel shield which was driven forward by hydraulic rams so that at no time was the roof of the excavation unsupported and the work was carried out in compressed air because of the presence of water in the ground being excavated. The completion of this part of the scheme should mark the end of a threat of flooding which caused anxiety to householders for many years. Work was also completed on the construction of a new open channel in the Bog Meadows south of Donegall Road and the flow from the Blackstaff River was diverted into this channel.

In connection with the scheme the City Surveyor recommended to the Improvement Committee the construction of a storm water pumping station at Glenmachan Street together with an inlet culvert and a 48 inch diameter pumping main in order to obviate flooding which occurred during short storms owing to sewers backing up (as opposed to flooding due to long storms in the catchment area of the Blackstaff River culvert). In the first instance the plant installed would deal only with storm water, which would be pumped to the culvert, but when development of the Bog Meadows occurred, sewage pumps would be installed and a pumping main laid to connect to the high level intercepting sewer. The estimated cost of the work, including transformer station, plant, etc., was £116,000. The estimated running costs per annum would be £12,000 plus an additional £2,000 per annum for the first five years to meet the cost of the electrical plant. The City Surveyor recommended to the Improvement Committee that, in conjunction with the Blackstaff River Improvement Scheme, the levels of the Bog Meadows should be raised and the area upstream of the present works made available for the development. Levels taken had shown that a large amount of water impounded in the Bog Meadows, could be drained away if the Blackstaff River was deepened upstream of the newly constructed channel for a distance of 400 feet and a drainage channel cut from this point to a culvert under the South Approach Road. This would facilitate the construction of the permanent works. The Committee agreed that the necessary work be carried out by direct labour.

The City Surveyor reported to the Improvement Committee on further investigations in connection with the culverting of various streams within the City which gave rise or were likely to give rise to flooding, were a potential danger to children and the culverting of which would improve the general amenities of the area. If the work was approved by the Ministry of Agriculture under the Urban Drainage Act 1957, the cost would attract grant of up to 50 per cent. The estimated cost of the works was £650,000.

During the year the Director of Education reported to the Education Committee that the owners of land adjoining Caledon Street were prepared to give permission for the necessary culverting of the stream in connection with the establishment of a play centre, on the understanding that the work was carried out at the expense of the Committee and on condition that provision was made for the disposal of surplus water on site. The Committee requested the City Surveyor to prepare an estimate of the cost of culverting the stream.

The City Surveyor reported to the Improvement Committee that York Street Flax Spinning Company had sought permission to put out of use the water storage pond at York Street premises and to have the supply culvert connected to the Corporation's high level sewer in North Queen Street. This supply pipe was fed from a mill dam at Pim Street on which site the Irish Christian Brothers proposed to construct a school. The Irish Christian Brothers had been consulted in the matter and it was recommended that permission be granted, subject to completion of an agreement with the school authority and York Street Flax Spinning Company whereby the Irish Christian Brothers would be required to lay a culvert across the site of the dam at Pim Street and have the dam filled in or otherwise dealt with to the satisfaction of the City Surveyor within a reasonable time.

The Corporation agreed to a proposal from the Castlereagh Rural District Council to pay 50 per cent of the net cost after receipt of grant of an Urban Drainage Scheme to relieve flooding in the Knocknagoney area adjoining the Corporation's housing estate.

During the year inspections were made to ascertain if any evidence of pollution or obstruction was apparent in the water courses within the City Boundary and in addition samples of waters were taken from the following rivers for bacteriological examination:—

Ballygomartin 6; Blackstaff 21; Carr's Glen 8; Clowney 12; Connswater 12; Downview 3; Falls 12; Farset 7; Forth 12; Glen 5; Glenwood 9; Greencastle 6; Knock 15; Lagan 9; Loop 15; Milewater 3; Moat 3; Mount Vernon 8; Parkmount 6; Pound Burn 4; Seaview 7.

The results of the examination of river water are as follows:—

TABLE B 18

Coliform organisms	No.	Faecal coli	No.	cl. welchii	No.
5 to 180 + per 100 ml.	183	0 to 180 + per 100 ml.	183	0 to 100,000 per 100 ml.	76

BARBERS AND HAIRDRESSERS

The Hairdressers Act (N.I.) 1939, requires that every person carrying on the trade or business of barber or hairdresser shall register his name and the address of the premises in which such business is carried on with the Corporation, who issue a certificate of registration. The Council has made bye-laws under this Act to deal with (1) the suitability and adequacy of premises (2) the cleanliness and repair of walls, ceilings, partitions, floors, etc. (3) a sufficient number of covered receptacles for the storage of all hair clippings and other litter (4) the cleanliness of chairs, washbasins and other fittings (5) the cleanliness of all instruments and equipment used in the business (6) the personal cleanliness of every person engaged in the trade or business and (7) the prevention of animals on the premises.

On 29 occasions contraventions of the bye-laws were noted and intimation notices given to th occupiers. On re-inspection the conditions were found to be satisfactory. No case was considere to require more than corrective action.

Inspections of barbers' and hairdressers' premises during the year ..	3,113
Registered at 1st January, 1962	491
Registered during the year	42
Deleted during the year	27
Registered at 31st December, 1962	506

COMMON LODGING HOUSES

Common lodging houses in Belfast are now subject to dual control under the Public Health an Local Government (Transfer of Functions) (No. 4) Order (N.I.) 1947. The provision and maintenance of sanitary accommodation, the abatement of public health nuisances and precautions agains the spread of infectious disease come under the control of the Health Authority, whilst registratio comes under the control of the Welfare Authority.

There are now five common lodging houses in Belfast with accommodation for 766 males. Commo lodging houses are now regarded as social welfare institutions and are expected to meet the requirements of persons who have no home, or who are unwilling or unable to find living accommodatio in normal family units. The emphasis is on the provision of social welfare amenities for the occupants i.e., to make them as homelike as possible. These lodging houses serve a useful purpose in accommoddating elderly persons who may otherwise be homeless. Much can be done to make them attractive Where nuisances were discovered by Public Health Inspectors at the time of inspection verbal notic was given to the lodging-house keeper: in cases of persistent offenders statutory notices were serve

Inspections by Public Health Inspectors during the year .. 97

AIR POLLUTION

In a statement to the members of the Northern Ireland House of Commons in December 196 the Minister of Health and Local Government reported that the Government had come to the cor clusion that existing legislation on clean air is inadequate and nothing less than a measure with th scope and aims of the Clean Air Act 1956, as operated in Great Britain, would suffice to deal with th problem. This news had been awaited for years by those interested in air pollution in Norther Ireland and if, in due course, clean air legislation on the lines indicated by the Minister is approve it must be realised that we cannot expect a radical transformation overnight. This is a long ten project, aimed at a steady reduction in the concentration of pollutants in the areas worst affected an Belfast Corporation faces a big task and must give particular attention to the fuel policies which wi give maximum impetus to a clean air programme.

In a city such as Belfast, where the proportion of coal used for domestic purposes, compare with industry, is relatively high, domestic sources must be reckoned to account for more than 50 pe cent. of pollution from smoke, so that progress will depend considerably on the availability of fue While householders will be free to choose any fuel which complies with the requirements of the Ac coke must be heavily relied upon as a solid fuel in the Belfast area and a heavy demand will be mad on local supplies of appropriate quality and price. There is a common belief that coke in domesti fires gives off fumes which are dangerous to health. This is a fallacy which will have to be overcom by better understanding. By fumes is presumably meant sulphur compounds, but the total emissio of sulphur from equal weights of coal and coke when burnt on a fire is the same and analyses of flu gases show similar concentrations. When coke is burned neither smoke, nor tarry matter is emitte whereas coal emits both, and the tarry smoke from coal fires is the source of the hydrocarbons foun in town air, which may be a contributing factor to lung cancer in city dwellers. No smoke is emitte from coke, yet the objection that it gives off "fumes" because of the smell under adverse condition is put forward, although the flue gases from coal show a sulphur dioxide concentration at the earl stages of combustion several times greater than the amount of sulphur dioxide given off from a cok fire. Why then the objection to coke on account of smell, since the total emission of sulphur dioxid from equal weights of coal and coke when burned in a fire are the same? It is probably because th smell of sulphur dioxide from coal is masked by the pungent smell of smoke if there is a blow dow

The same standard of comfort obtained from one ton of coal for domestic heating can be obtaine from 15-16 cwts of coke (whether gas coke or low-temperature coke). As coke contains on averag the same percentage of sulphur as coal, the change from coal to coke should produce a decrease of 20-25% in the amount of sulphur oxides emitted. In addition to this, householders who meet the requirements of a Smoke Control Order may change from open fires to electricity, gas or oil, and it is probable that in a purely residential area the decrease in sulphur pollution would more nearly approach 25% than 20%.

Emission of sulphur from industrial plant is unlikely to be affected by the introduction of smoke control but hand firing of coal has to be changed to mechanical firing or the plant converted to oil. Change from hand firing to mechanical firing of coal is accompanied by an improvement in combustion efficiency and should therefore lead to a small decrease in the emission of sulphur corresponding to the saving in the fuel.

There has been concern in Great Britain because of the absence of specific powers to deal with gaseous pollutants, in particular sulphur oxides, but investigations are still taking place into methods of reducing sulphur in coal and oil. These investigations appear unlikely to produce practical results for some time but local authorities can control the height of industrial chimneys and allow for the better dispersal of pollutants.

Almost every day traffic congestion in the centre of Belfast increases with an accompanying increase in the density of exhaust gases, from which there is no escape. Unlike pollution from domestic fires and space heating plant, which are little used in the summer months, this low level pollution in walled-in city streets is present in the summer as well as in the winter. Black smoke from a diesel engine is caused by incomplete combustion arising from either poor quality fuel, insufficient atomisation of the fuel or inadequate air in the mixture. There may be other factors causing incomplete combustion, but the problem is not likely to be solved by simple exhaust filters. In Great Britain the Ministry of Transport's recent spot checks on diesel vehicles for fume emission has been given good publicity. The examiners have power to put badly smoking vehicles off the roads or require them to be serviced.

At the end of the year visits were still being made to a housing area adjoining a large foundry from which a severe dust and grit nuisance was experienced in the early months of 1962. Measures taken by the company on the advice of the Senior Smoke Inspector have done much to minimise the inconvenience and nuisance to which nearby residents were subjected since the plant for cleaning and drying sand was installed. The installation of wet collectors for separation of dust, together with suction fans in the foundry at all points where dust or grit is likely to become air borne, have proved expensive, but have greatly improved the living conditions in nearby dwellings as well as the comfort of foundry employees.

Considerable trouble is still experienced with dense smoke from a number of firms who burn wood waste, and by scrap dealers who recover copper from burning rubber or plastic covered cable. All combustible refuse has a calorific value and if possible it should be used as a fuel. This is more easily said than done, for, unfortunately, there are a number of factors which combine to make such practice difficult to achieve without nuisance. The plant should be designed specifically for the purpose of burning waste and may prove expensive to build, although there is now on the market a relatively inexpensive incinerator capable of burning small quantities of material smokelessly: this has not yet been seen in Belfast. Waste materials used as fuel may be light in weight and bulky with a low calorific value, and these factors tend to make control of combustion difficult to attain. The products arising from combustion or incomplete combustion as the case may be, are in the form of smoke and grit which are more concentrated than is the case with standard fuels and they may be emitted from ground or a very low level. Without a specially designed furnace the recovery of metal from cables can only be done in the open air, and a number of firms engaged in this work have been requested to carry out burning on open land close to the sea and far removed from any buildings and to notify the Health Department prior to burning. The burning is controlled in small quantities, at a time when the direction of the wind carried any smoke emitted out to sea. It is to be hoped that if large quantities of rubber or plastic covered cable are to be subjected to incineration by merchants dealing in this material, that the Health Department can insist on the erection of a properly constructed furnace capable of dealing with this waste product smokelessly and without causing a nuisance. A firm engaged in dismantling motor vehicles, although previously warned, persisted in the burning of rubber tyres and car battery cases in a yard close to dwelling houses and was summonsed. The Resident Magistrate imposed a fine of £5 and made an Order prohibiting this practice.

For some years past recordings have been made of smoke emission in Belfast. Five standard deposit gauges, four lead peroxide instruments and ten daily volumetric filters are now maintained by the Health Department. Two deposit gauges, two lead peroxide candles and one daily volumetric filter were erected during the year in the area in which arose the foundry nuisance previously referred to. Analysis of these recently installed instruments showed that whilst the area was "dirty" it compared not unreasonably with the results of analysis of several other sites in the city from which readings have been obtained since 1954.

The overall picture resulting from the two forms of monthly recording instruments show that whereas there is a slight rise in the solid deposited matter, there is a slight reduction in sulphur. These changes do not show any significant change in the general pattern of previous years as weather, wind direction and rainfall play such an important part in the results obtained from this form of recording. The results obtained from daily readings follow very much the pattern of the weather, low in summer when fuel burning is at a minimum, and high in winter when the maximum amount of fuel is burned and when the City is subjected to fogs and haze which trap pollutants and bring them down to ground level. The smoke present in the air is retained on a filter paper and consist of particles roughly 10 microns (1/2,500 of an inch) diameter or less. Such particles are too small to fall noticeably under their own weight and can be regarded simply as suspended in the air, moving only with the wind. In foggy weather it is these particles adhering to water droplets which form "smog" and these, plus the sulphur oxides in the air, are contributory factors in the death of so many persons, especially elderly persons suffering from bronchitis, asthma and other respiratory complaints.

The establishment of a Northern Ireland Division of the National Society for Clean Air during the year has done much to encourage interest in this problem and to bring together representatives of central and local government, industry, medical and other interested persons, with the result that the publicity obtained and the resources of this society should lead to a widening of the knowledge of the average person on one of the problems a modern community is no longer content to take for granted.

The following table shows the work done in connection with air pollution during 1962:—

Timed observations (each over a continuous period of 30 minutes)	2,447
Minutes of black smoke observed	2,231
Average minutes black smoke per 30 minutes observation	1.1
Statutory notices served	36
Verbal notices given	134
Summonses	1
Plant inspections and advisory visits	3,077
Complaints investigated	70
Number of factory chimneys	420

Location of Atmospheric Pollution Recording Sites

Health Department

1. Ormeau Avenue
2. York Road Station
3. Station Street
4. Forfar Street No. 1
5. Forfar Street No. 2
6. Northern Road
7. Grove
8. College Street
9. Templemore Avenue
10. North Road
11. Balmoral Avenue
12. Falls Road
13. Mountcollyer Street
14. Lowwood Park
15. Queen's Bridge
16. Dufferin Road
17. Forfar Street

Queen's University, Belfast

18. Royal Victoria Hospital

Belfast Corporation Electricity Department

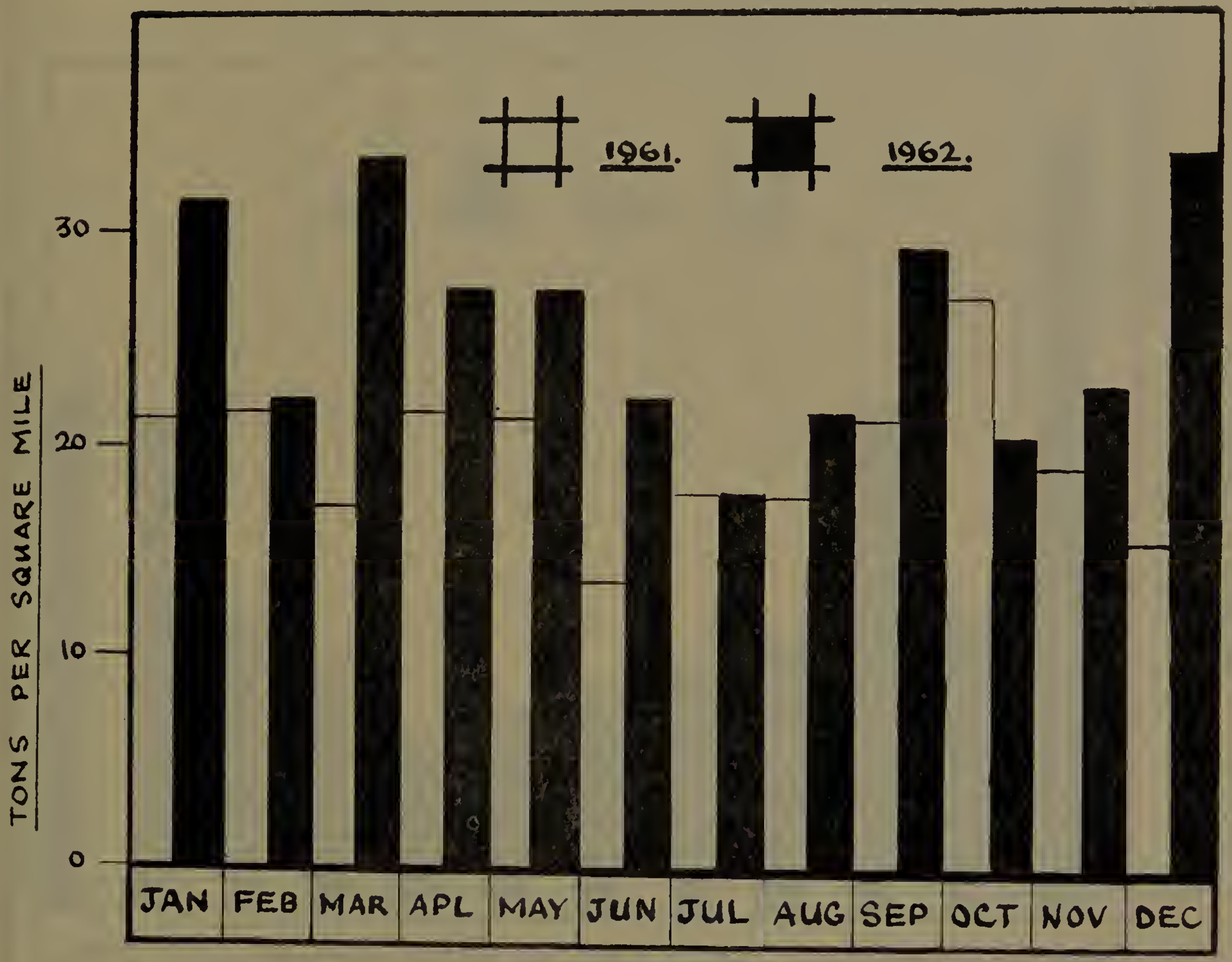
19. Sydenham Airport
20. Duncrue Street
21. Great Patrick Street
22. Skegoneill Street
23. Park Avenue
24. Templemore Avenue
25. East Bridge Street
26. Victoria Works, Queen's Road
27. Thompson Dock, Queen's Road
28. East Twin Lighthouse

World Health Organisation

City Hall
Edinburgh Street
Upper Riga Street
Mountcollyer Street
Ravenscroft Avenue

GRAPH ONE.

Monthly Average of Solid Matter Deposited, Tons per Sq. Mile



Solid matter deposited in tons per sq. mile at collecting stations during 1962—(see also Graph 1)

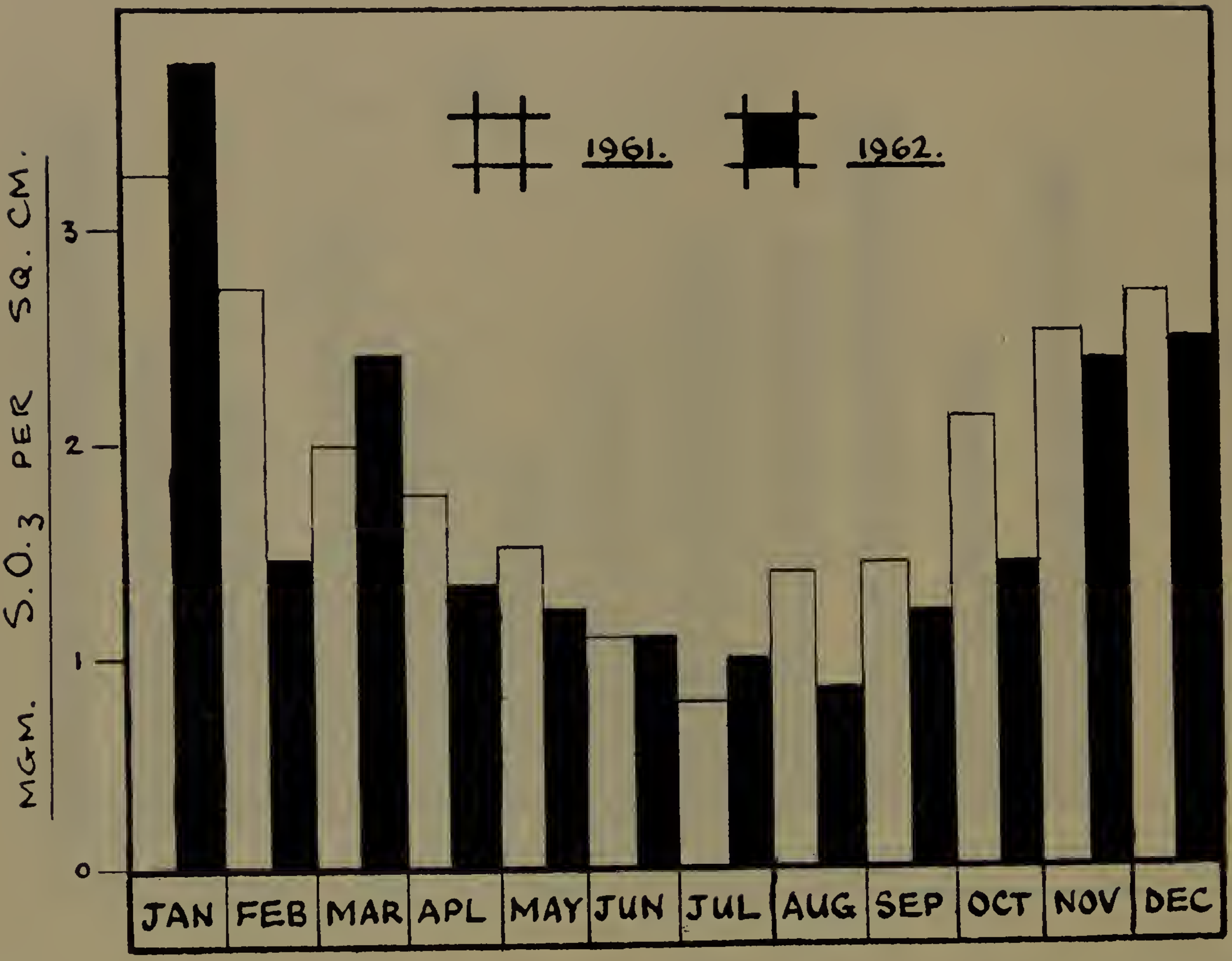
TABLE B 19

Month	Stations					Totals	Monthly averages
	1	2	3	4	5		
January	31.85	36.42	26.98	—	—	95.25	31.75
February	21.04	20.95	24.23	—	—	66.22	22.07
March	38.68	30.52	29.64	—	—	98.84	32.95
April	29.92	22.91	35.90	22.72	23.80	135.25	27.05
May	31.38	24.98	25.87	18.89	33.80	134.92	26.98
June	20.10	20.44	21.61	19.03	28.12	109.30	21.86
July	23.30	17.41	18.49	12.22	18.12	89.54	17.91
August	19.39	20.21	18.29	15.37	31.35	104.61	20.92
September	31.38	26.85	33.46	20.74	28.63	151.06	30.21
October	19.76	20.57	20.51	16.00	23.83	100.67	20.13
November	26.25	25.35	23.69	—	16.21	91.50	22.87
December	30.84	34.35	34.90	23.43	44.12	167.64	33.53
Totals	323.89	300.96	313.57	148.40	247.98		
Averages	26.99	25.08	26.13	18.55	27.55		

— No recordings taken

GRAPH TWO.

Monthly Average Weight of SO_3 per 100 square centimetres of Exposed Surface per day (Lead Peroxide Method).



Sulphur determination by lead-peroxide method at the four stations during 1962—(see also Graph 2)

TABLE B 20

Month	Station				Totals	Monthly averages
	4	5	6	7		
January	—	—	4.5	3.2	7.7	3.8
February	—	—	1.7	1.4	3.1	1.5
March	—	—	3.0	1.9	4.9	2.4
April	1.4	1.2	1.3	1.3	5.2	1.3
May	0.8	1.0	1.9	1.1	4.8	1.2
June	0.6	0.8	2.3	0.7	4.4	1.1
July	0.6	0.6	1.6	0.6	3.4	0.9
August	0.5	0.7	1.4	0.7	3.3	0.8
September	1.1	0.8	2.1	1.0	5.0	1.2
October	0.08	1.3	1.7	2.6	5.7	1.4
November	2.0	1.7	3.4	2.1	9.2	2.3
December	2.0	2.1	3.3	2.3	9.7	2.4
Totals	9.08	10.2	28.2	18.9		
Averages	1.0	1.1	2.4	1.6		

— No recordings taken

SO_3 per 100 sq. centimetres as recorded by instruments maintained by Belfast Corporation Electricity Department

TABLE B 21

Month	Stations										Totals	Monthly averages
	19	20	21	22	23	24	25	26	27	28		
Jan.	7.37	3.08	3.62	2.79	2.04	2.88	2.53	7.17	4.44	5.28	41.20	4.12
Feb.	4.73	1.83	2.56	1.56	1.81	2.51	2.04	4.55	5.33	2.29	29.21	2.92
March	2.56	2.05	2.39	1.64	1.73	2.53	1.52	2.73	2.25	1.19	20.59	2.06
April	2.77	1.04	1.97	1.03	1.15	1.84	1.27	3.20	2.67	1.52	18.46	1.84
May	3.16	0.82	1.08	0.69	0.97	—	0.92	1.43	1.45	0.93	11.45	1.27
June	3.13	0.90	0.83	0.65	0.68	—	0.88	1.94	1.51	2.04	12.57	1.39
July	1.19	1.03	1.02	0.71	0.57	—	0.79	0.44	0.86	0.44	7.05	0.78
August	3.10	1.20	0.89	0.67	0.63	—	0.83	1.01	1.30	2.09	11.72	1.30
Sept.	2.41	1.24	1.29	0.90	0.78	1.30	1.00	1.14	1.44	1.07	12.57	1.26
October	3.29	1.54	1.88	1.49	1.21	1.82	1.47	1.99	2.46	2.35	20.50	2.05
Nov.	2.64	2.59	2.58	1.99	1.62	2.65	1.74	3.07	2.90	2.04	23.82	2.38
Dec.	5.32	1.92	2.51	1.90	1.70	2.55	1.57	4.64	4.36	2.80	29.27	2.93
Totals	41.67	19.24	22.62	16.02	14.89	18.08	16.56	33.31	30.97	24.04		
Averages	3.47	1.60	1.88	1.33	1.24	2.26	1.38	2.78	2.58	2.00		

— No recordings taken

Rainfall at five deposit gauge stations for 1962

TABLE B 22

Station	Rainfall in Inches											
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
No. 1	3.70	1.81	2.21	2.09	2.44	1.26	2.29	5.28	5.83	1.97	3.70	4.37
No. 2	3.82	1.69	2.17	1.97	2.01	1.38	2.13	4.96	5.89	1.89	3.86	4.18
No. 3	3.70	2.09	2.13	1.85	2.13	1.46	2.25	5.24	5.79	1.85	3.66	3.90
No. 4	—	—	—	2.36	1.77	1.50	2.25	5.04	5.91	2.25	3.74	4.81
No. 5	—	—	—	2.32	1.77	1.46	2.32	4.93	5.91	2.25	4.96	4.93
Monthly average	3.74	1.89	2.17	2.12	2.02	1.41	2.25	5.09	5.86	2.04	3.98	4.44

— No recordings taken

Results of the Daily Volumetric Instruments maintained by the Health Department

(Concentration of Smoke and Sulphur Dioxide in microgrammes per cubic metre)

TABLE B 23

Month	Stations																																							
	8				9				10				11				12				13				14				15				16				17			
	Smoke		SO_2		Smoke		SO_2		Smoke		SO_2		Smoke		SO_2		Smoke		SO_2		Smoke		SO_2		Smoke		SO_2		Smoke		SO_2		Smoke		SO_2		Smoke		SO_2	
	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr
January	266	1063	177	607	332	801	159	525	178	563	89	299	111	366	63	166	207	637	69	272	370	1324	208	786	260	1370	146	965	259	937	165	619	249	851	146	492	—	—	—	—
February	136	350	163	294	336	420	181	270	116	240	100	245	87	160	66	134	119	215	81	144	214	520	162	363	111	275	78	223	198	410	113	292	171	290	152	243	—	—	—	—
March	177	600	214	410	387	1130	222	503	225	800	106	362	145	490	98	230	162	440	99	210	246	840	202	625	162	690	152	435	264	1090	159	460	207	640	144	458	—	—	—	—
April	89	440	127	324	200	400	144	252	88	120	68	175	84	208	68	166	112	184	67	140	141	390	121	236	104	300	73	213	159	384	127	210	142	510	119	288	137	432	138	324
May	36	80	81	220	119	200	106	171	49	100	52	102	35	120	47	113	55	170	54	136	93	230	90	325	54	180	62	186	106	200	87	173	105	170	90	244	102	250	124	186
June	16	32	49	198	66	139	72	118	34	52	52	111	20	55	21	62	38	70	39	75	60	112	78	172	31	61	47	122	67	136	59	113	58	93	58	121	61	102	67	120
July	30	76	57	113	78	121	84	128	30	52	47	97	53	117	53	92	43	78	49	83	57	130	82	184	40	104	46	82	79	157	86	154	74	149	93	213	63	113	69	129
August	21	41	45	82	82	127	84	154	—	—	—	—	35	81	37	77	54	89	47	154	85	144	95	168	45	110	46	93	85	147	78	143	76	130	67	110	89	144	72	139
September	62	199	88	188	113	230	108	190	—	—	—	—	64	153	57	130	73	147	52	107	118	217	122	243	64	138	64	165	113	217	101	203	85	151	96	188	121	228	67	172
October	231	532	143	279	249	632	155	297	172	232	124	182	127	448	85	203	128	212	75	153	313	736	187	515	110	404	109	266	195	408	150	282	132	420	136	278	256	740	93	179
November	293	704	262	505	360	648	225	344	186	536	153	319	146	672	127	383	233	560	105	210	397	936	357	718	227	624	144	382	263	474	216	435	173	360	199	414	324	840	223	561
December	260	944	197	649	329	480	195	286	158	259	118	167	146	304	93	263	209	400	92	171	309	652	250	552	193	444	144	331	193	316	166	306	184	336	173	334	296	552	242	382

ma—Monthly average. hdr.—Highest daily reading.

Heaviest Pollution—

Smoke—Lowwood Park, 4th January; 1,370 Mg. per cubic metre.

SO_2—Lowwood Park, 4th January; 965 Mg. per cubic metre.

Lightest Pollution—

Smoke—College Street, 13th August; Queen's Bridge, 19th June; 0 Mg. per cubic metre.

SO_2—Falls Road and Lowwood Park, 11th April; 0 Mg. per cubic metre.

Results of Daily Volumetric Instrument maintained by Queen's University, Belfast
(Concentration in microgrammes per cubic metre)

TABLE B 24

Month	Station 18			
	Smoke		SO_2	
	M.A.	H.D.	M.A.	H.D.
January	185	590	118	293
February	129	370	90	206
March	283	620	203	384
April	150	320	110	254
May	60	180	52	117
June	40	110	41	85
July	57	138	45	98
August	40	125	50	102
September	93	209	82	210
October	175	588	122	343
November	280	530	171	313
December	740	970	156	612

PORT SANITARY

During the year the Belfast Harbour Commissioners brought into operation the new £1,000,000 British Railways freight terminal at Gotto Wharf, Herdman Channel West. The new facilities bring British Railways capital investment on the Belfast-Heysham route since 1956 to £7,000,000 and are expected to produce a marked acceleration of freight movement between Great Britain and Northern Ireland. The terminal was planned some years ago and its completion involved Belfast Harbour Commissioners in a major development scheme to provide three ships' berths of a total length of 1,083 feet.

With the transfer of the general cargo and livestock vessels to Gotto Wharf, much-needed space on Donegall Quay is freed to allow improved passenger amenities. The new accommodation has been provided to keep pace with the increasing trade between Britain and Ulster, coupled with the advent of many new industries in the Province. The Harbour Commissioners have also provided a large area to be used specially for marshalling containers. The berths have been furnished with electric transporter cranes, as well as electric mobile cranes. A special feature is a loading bay, an innovation at Belfast Docks, which will greatly facilitate loading of cartage vehicles and quicker delivery of goods to consignees. An important point connected with the concentration of cargo vessels at Herdman Channel will be the transfer of livestock traffic from Donegall Quay. Until now it has been dealt with through the accommodation common to passengers and general cargo. Belfast Corporation are to construct a cattle market, lairages and abattoir near the Herdman Channel and this will avoid the necessity of taking livestock through the streets. Until the abattoir becomes available, the Ulster Transport Authority will accommodate cattle for shipment via Heysham at their Duncrue Street lairages not far from the new berths.

Completed in 18 months and now in production is the new Richardson's Fertilizer Factory, built on reclaimed land north of the Herdman Channel. The works are served by a new deep water wharf 500 feet long. Enlargement and modernization of ship-building berths and plant continues at Harland and Wolff's Musgrave Yard. Included in the vessels launched or completed during the year were the cargo vessel **"Port Nicholson"**, also the large oil tankers **"Regent Liverpool"** and **"British Lancer"** and the refit of the liners **"Queen of Bermuda"**, **"Ocean Monarch"** and **"Southern Cross"**. An oil jetty capable of taking 33,000 tons d/w oil tankers and connecting with the new oil refinery, is at present under construction on the east side of the Musgrave Channel, supplementary to the existing oil wharves.

Daily inspections by Port Public Health Inspectors of cross channel passenger vessels are directed primarily to the accommodation, passenger and crew; for the purpose of disinfection of rooms and bedding following any cases of infectious diseases: galleys, pantries and provision stores and cargo spaces (where possible) are also inspected. Defective conditions discovered on board are reported to the Master and subsequently notified to the owners. The requirements of the Port Public Health Inspectors have been readily and fully complied with by shipping agents or owners. Spraying of passenger accommodation in cross-channel vessels with a germicide is carried out as a daily routine. Insecticidal spray is in continuous use, principally against flies, and, when necessary, insecticidal smokes are used to eradicate other insect pests. In one cross-channel cargo vessel it was necessary to disinfect the entire crew's accommodation and bedding following a case of infectious skin disease. Early in the year, during an outbreak of smallpox in England, notification of the passage of a contact in one of the cross-channel passenger steamers was received. The precautionary measures taken at the Port included disinfection of the cabin and bedding, and vaccination of the Master and crew, shed and store personnel, porters and dockers.

Of the total drinking water samples taken from cross-channel vessels including the daylight 'Manx' and 'Ardrossan' vessels, also the Preston ferries, bacteriological examination showed that almost 30 per cent of the total samples contained coliform organisms. This percentage applied mainly to two vessels from which it was necessary to obtain repeat samples following a number of treatments of the ship's drinking water storage tanks and systems with a highly concentrated chlorine preparation to remove the contamination, which could have been introduced into the system at the time of the vessel's annual refit. In other vessels where chlorinaiton of drinking water in storage tanks and systems was included as a routine measure during the refit, bacteriological examination showed the water to be highly satisfactory.

Replacement of older type coal burning coasters by modern motor vessels continues. Two tugs and one cargo vessel were converted from coal to oil burning and another steam tug was replaced by a motor driven tug. Emissions of black smoke from vessels were dealt with by the Port Public Health Inspectors and Senior Smoke Inspector: details of these appear in the body of this report.

Insect infestation (mainly steam-fly in galleys and store rooms) was discovered in a number of vessels during the year, despite routine servicing by crews using insecticidal spray. Where infestation was extensive, treatment by insecticidal powder, lacquers or smokes was applied. In cases where ships' food in stores was found to be infested with insects, notification was given to the local Marine Survey Branch of the Ministry of Transport.

In a number of vessels arriving at Belfast from foreign ports it was found that the Deratting Exemption Certificates had expired on voyage but as the vessels were discharging part cargo only it was impossible to carry out a complete search for rodents. These vessels were, however, searched as thoroughly as conditions permitted and notifications of the extent of infestation and remedial measures carried out locally were forwarded to the Port Health Authorities to which the vessels were sailing to complete discharge of cargo. Subsequent fumigation of vessels by hydrogen cyanide resulted in satisfactory kills. In a number of instances interim eradicative treatment by the use of baiting and trapping was applied, also rat-guards were fitted to all mooring lines and white painting and illumination of gangways to restrict movement of rats from ships to shore.

Particular attention was given to the setting down of bagged flour and sugar, especially in sheds where general cargo is handled, mainly to prevent contamination from contact with shed surfaces and possible spillage from other cargo of an obnoxious or chemical nature. Shipping agents and stevedores provided additional protection where required. On occasions when berthage or shed space is not readily available, it becomes necessary to discharge cargoes of foodstuffs, mainly canned and cartoned but occasionally bagged or open-crated such as citrus fruits, onions, etc., into a shed in close proximity to one receiving discharge of bagged cement. On such occasions the Port Public Health Inspectors contact the Belfast Harbour Commissioner's Traffic Superintendent, shipping agents and stevedores to obtain early removal, repair or coverage of damaged cases and/or cartons. The additional shed space and wharf in course of completion on the west side of Victoria Channel will overcome this problem of unsuitable storage.

Several tierces of hog-casings were alleged by the importer to be infested with insects and he refused to take delivery. The casings were thoroughly examined and infestation was found to be slight. Specimens of the casings, salt and insects were submitted to the Entomology Division of the Ministry of Agriculture for examination. The insects were classified as a species of shore fly innocuous to the casings. Containers used in the sea transport of meat, also cargo boxes used for the carriage of meat offals, received continuous inspection in respect of cleanliness, structural condition and methods of cleansing and drying. Considerable consignments of Ceylonese desiccated coconut arrived at the Port by direct shipments from Colombo. From each consignment samples were taken for bacteriological examination at the Central Laboratory and in no case were intestinal pathogens isolated. Samples were taken for chemical analysis from direct shipments of Australian wheat flour. Deficiency in chalk was evident in certain brands: in some of the samples analysed the amount present was much below the minimum standard required by the Flour (Composition) Regulations (N.I.) 1961. This deficiency was notified to the Ministry of Health and Local Government, who communicated with the office of the Commissioner for Australia. A guarantee was given by the Australian millers that flour produced for export to Northern Ireland would comply with the standards required by the Regulations. Sampling of such flour continues.

Reports of rodent and insect infestation, rat harbourage, defective rat-proofing, etc., where found by the Pests Officer in vessels, dock-side premises, sheds, timber stacks and wharves were further investigated by the Port Public Health Inspectors and where it was considered necessary intimation notices were served on agents and owners. To meet the increased duties arising from the expansion of the Port within the Harbour Estate, the Port Health Staff has been augmented by the appointment of an additional Port Public Health Inspector. Contact was maintained with the officers of H. M. Customs and Excise Waterguard Landing and Shipping Branches, Home Office Immigration Branch, Ministry of Transport Marine Survey Branch, the Belfast Harbour Commissioners and the Belfast City and District Water Commissioners (Ships' Water Office) all of whom have been most co-operative and helpful.

There was a decrease of 363 in the total number of vessels arriving at the Port during 1962 compared with arrivals for 1961, with an increase of 264,583 in the total net registered tonnage, as follows:

TABLE B 25

Description of vessels	Number of vessels			Net registered tonnage		
	1961	1962	Decrease	1961	1962	Increase
Coastwise including non-trading	6,849	6,531	363	4,897,675	4,946,597	48,922
Foreign going	917	917	—	1,541,632	1,759,293	215,661

Ships launched by Harland and Wolff Ltd., at Belfast during 1962:—

"British Cygnet" single screw tanker 11,131 gross tons.

"Regent Liverpool" single screw tanker 30,770 gross tons.

"Port Nicholson" twin screw cargo vessel 13,847 gross tons.

"British Lancer" single screw tanker 31,000 gross tons.

The Corporation of Belfast as the Sanitary Authority was permanently constituted the Port Sanitary Authority for the Port of Belfast by the Local Government Board (Ireland) Provisional Orders Confirmation (No. 4) Act, 1900.

The expenses of the Port Sanitary Authority are contributed by the Urban and Rural Sanitary Authorities in the following proportions:—

Corporation of Belfast	92 per cent
Carrickfergus Urban District Council	1 per cent
Holywood Urban District Council	1 per cent
Bangor Borough Council	1 per cent
Newtownabbey Urban District Council	1½ per cent
Castlereagh Rural District Council	1½ per cent
Larne Rural District Council	1 per cent
North Down Rural District Council	1 per cent

I. Amount of shipping entering the Port during the year 1962:—

TABLE B 26

From	Number	Tonnage	Number inspected		Number recorded as defective	Ships on which defects have been remedied	Ships reported as having had infectious disease on board during the voyage
			By Medical Officer	By Port Public Health Inspector			
FOREIGN: Steamers } Motors }	917	1,757,293	54	898	97	94	11
COASTWISE: Steamers } Motors }	6,531	4,946,597	16	1,309	78	76	8
Total	7,448	6,703,890	70	2,207	175	170	19

II. Character of trade of port:—

(a) Passenger traffic (other than coastwise) during the year:—

TABLE B 27

Passengers	Aliens		British		Total		Refused leave to land
	Forces	Civilian	Forces	Civilian	Forces	Civilian	
Inwards by ship	36	525	—	576	36	1,101	Coastwise only 3
Inwards by Aircraft	3	464	421	1,932	424	2,396	—
Total	39	989	421	2,508	460	3,497	3
							Refused leave to embark
Outwards by ship	36	407	—	550	36	957	—
Outwards by Aircraft	—	353	841	2,035	841	2,388	—
Total	36	760	841	2,585	877	3,345	

(b) Cargo Traffic:—

Principal Imports: Maize, wheat, barley, oats, flour, butter, fruit (fresh, dried and canned), meat and meat products, lard, tea, sugar, coffee, fish, vegetables, eggs (frozen and powder), desiccated coconut, wines, ales, cordials, carobs, grain, offals, cattle, pig and poultry fodder, hides (cured), timber, wood-pulp, newsprint, flax, hemp, coir, rayon fibre, chemicals, fertilizers, oil cake, coal, coke, oil (burning and lubricating) steel, iron, brass, copper, lead, tinplate, duralium, plastics, cement, tar, asphalt, vehicles, tobacco.

Principal Exports: Potatoes (seed and ware), apples, poultry, pork, fresh fish, shellfish, eggs, canned goods, live cattle, sheep and pigs, whiskey, tobacco, cigarettes, machinery (mercantile and textile), ropes, nets, twine, thread, linen, grass-seed, fire extinguishing foam, scrap metals.

(c) **Foreign Ports from which ships arrived:—**

Aafnare Jordun 1; Aalsburg 1; Abadjan 2; Abo 2; Adelaide 1; Ala 1; Alexandria 1; Algiers 2; Alicanti 1; Amsterdam 6; Antwerp 41; Ardrossan, S. A. 1; Aruba 1; Archangel 7; Baie Comeau 1; Bahia Blanca 1; Barcelona 2; Bayonne 17; Bedi Bunder 6; Beira 15; Bhavnagar 1; Blankaholm 1; Bodo 1; Bombay 4; Bone 1; Borgo 1; Bordeaux 4; Boston Mass. 2; Bremen 12; Bridgewater N. S. 1; Brisbane 2; Brest 1; Brugge 1; Brussels 1; Buenos Aires 8; Bueriana 1; Bunbury 1; Burenin 1; Burin 1; Caen 2; Calcutta 2; Capetown 12; Cartagena 15; Cagliari 1; Catania 1; Ceuta 1; Casablanca 14; Chatham N. B. 1; Chicago 2; Chittagong 2; Chalna 1; Churchill 1; Cochin 1; Colombo 2; Constanza 2; Copenhagen 12; Cornerbrook 3; Corral 1; Christobal 1; Curacao 1; Dakar 9; Dahouet 2; Dalhousie 1; Detroit 1; Dunkirk 2; East London 1; Esbjerg 7; Esmeraldas 1; Famagusta 8; Fortwilliam 2; Freetown 1; Frederiksund 5; Fremantle 9; Gothenburg 16; Gandia 2; Gdansk 1; Genoa 2; Gerlandtown 6; Georgetown 1; Ghent 45; Grindstone 1; Hallstavik 2; Haifa 4; Halifax, N. S. 1; Halmstad 1; Hamburg 33; Hamina 5; Helsinki 6; Huelva 4; Ijmuiden 1; Istanbul 1; Itajai 1; Izmir 2; Kotka 7; Kapelle 1; Karachi 2; Katakalon 1; Kiel 2; Kikuma 1; Lagos 1; Larvik 4; Latakia 1; La Pallice 4; Lourenco Marques 4; Leghorn 2; Leipaja 1; Le Leque 1; Leningrad 1; Le Vorve 1; Lexioes 1; Le Treport 2; Limasol 4; Los Angeles 1; Lorient 5; Luderitz Bay 2; Majorca 2; Malaga 5; Manati 1; Mangalore 1; Mantyluoto 4; Melbourne 3; Messina 2; Milwaukee 1; Miramichi 3; Mombasa 6; Montreal 21; Naples 1; Newport News 4; Newcastle, N. B. 1; New Orleans 1; Nemours 1; New York 2; Norfolk, Va. 19; North Sydney 1; Nordfjord 2; North Weymouth, N. S. 2; Novorossisk 3; Odessa 1; Oran 4; Oslo 9; Ostend 1; Paimol 1; Palermo 4; Palma 4; Paphos 1; Pasajes 1; Pastelilio 1; Patras 1; Philadelphia 8; Piraeus 1; Port Elizabeth 1; Port Alfred 3; Port Lincoln 1; Port Louis 1; Port Sudan 3; Quebec 2; Randers 1; Rangoon 4; Recife 1; Rieme 1; Rosario 2; Rotterdam 61; Rouen 30; Salerno 1; San Francisco 1; Saint John, N. F. 1; San Sebastian 4; Sapele 1; Sherboro 1; Sheet Harbour 1; Siglufjord 2; Sorel 1; Stettin 3; St. Helena 1; St. John, N. B. 14; Sundsval 1; Sydney 2; Svolved 1; Sydisfjord 1; Takoradi 2; Tallion 10; Tanga 1; Three Rivers 10; Toledo 1; Tonnay Charente 4; Trincomalee 2; Torrevieja 1; Toronto 2; Trieste 2; Trinidad 1; Trondhiem 1; Uddevalla 1; Valencia 10; Valparaiso 2; Vancouver 8; Ventspils 4; Vestmanear 1; Victoria, B. C. 1; Vikholmin 1; Vilvorde 1; Wallaroo 2; Walvis Bay 4; Wilmington 3; Wismar 6; Wormerveer 2; Yxpila 2; Zaandam 1; Zanzibar 4.

The nationality of the ships which arrived at the Port and were inspected was as follows:—

Argentinian 5; American 1; Belgian 6; British 1,363; Danish 31; Dutch 467; Finnish 3; French 12; German 96; Ghanaian 1; Greek 15; Icelandic 6; Indian 5; Israeli 1; Italian 6; Lebanese 3; Liberian 22; Norwegian 42; Panamanian 1; Polish 3; Republic of Ireland 15; Russian 21; Spanish 19; Swedish 27; Union of South Africa 6; Yugoslavian 1.

The Aliens Order 1953 (S. I. 1671/1953)

Under Articles 30 and 33 of the above Order, Dr. W. G. Swann, Dr. J. McA. Taggart, Dr. W. J. McLeod and Dr. A. L. Walby have been appointed by the Ministry of Health and Local Government as Medical Inspectors for the Port of Belfast for the purposes of the Order.

Ships carrying aliens including those granted * T.S.L.	143 inwards; 82 outwards
Aircraft carrying Aliens	25 inwards; 21 outwards

* T.S.L.—Temporary Shore Leave.

III Water Supply

(a) and (b) for port and shipping:—

The port water supply is obtained from the Belfast City and District Water Commissioners' mains which feed the Belfast Harbour Commissioners' hydrants on quaysides from which vessels are supplied by hosepipes connected to meter/standpipes under the control of the B.W.C. personnel.

(c) Water boats:—

There are no waterboats at the port.

Water Sampling

52 samples of drinking water were taken on board vessels and submitted to the Public Health Laboratory for bacteriological examination. 37 of these samples were found to be highly satisfactory and 15 samples unsatisfactory due to the presence of coliform organisms. In no case were coliform organisms of faecal origin present. Where analysis revealed contamination, the ship's water tanks, pumps and systems were thoroughly flushed and chlorinated with effective results in every case.

IV. Public Health (Ships) Regulations (N.I.), 1954:—

1. Arrangements for dealing with Declaration of Health forms:—

Declaration of Health forms as recommended by the Association of Sea and Air Port Health Authorities of the British Isles are in use at the port. Special instructions relative to the Port of Belfast are given on the fourth page and a supply of these forms is distributed to H.M. Customs Officers and the Belfast Harbour Commissioners for the use of the Pilotage service.

A Declaration of Health form signed by the master and countersigned by the ship's surgeon (where one is carried) is received from each ship arriving at the port from a foreign port. The Declaration of Health Form is received by the Customs Officer or the Port Public Health Inspector on the arrival of the ship. The answers to the questions contained in the Declaration are scrutinised and supplementary questions asked.

In cases where the Customs Officer first boards the ship and the Declaration of Health is satisfactory, pratique is granted. If the Declaration of Health is not satisfactory, the circumstances are immediately reported to the Port Medical Officer, who makes investigations before passengers or crew are allowed to land.

Ships arriving at the port are required to display the appropriate quarantine signals as laid down in the regulations.

392 completed Declaration of Health Forms were received from vessels arriving at the Port from foreign ports other than "Excepted Ports".

2. Boarding of Ships on arrival:—

All ships arriving from a foreign port are boarded on arrival by an officer of H.M. Customs and an officer of the Port Sanitary Authority.

3. Notification to the Authority of inward ships requiring special attention (Wireless messages, land signal stations, information from pilots, Customs Officers, etc.):—

Arrangements for the transmission of wireless messages from inward bound ships requiring special attention under the Regulations have been made with the various shipping companies and agents in Belfast. Under the arrangements the shipping companies receive the wireless message required under Regulation 13 and forward the information to the Port Medical Officer.

Alternatively, or in addition, wireless messages are received direct by the Port Sanitary Authority, the telegraphic address "Portelth, Belfast" having been registered for this purpose. (Regulation 14 (1) and (2)).

No land signalling system is in operation.

Close co-operation exists between the Port Sanitary Authority and the Officers of H.M. Customs and notifications of ships requiring special attention are received from the latter.

4. Mooring stations designated under Regulations 22 to 30:—

With the concurrence of H.M. Customs and the Belfast Harbour Commissioners, the ordinary places of mooring, discharge or loading have been designated mooring stations in relation to inward ships from foreign ports.

5. Experience of working of Regulation 18: restriction on boarding or leaving ships:—

In carrying out the provisions of this Regulation during the year no difficulty arose and it was not necessary to require passengers to furnish names and destinations, etc., as there was no case of infectious disease on board any ship arriving at the port which required this procedure.

6. Arrangements made for:—

Regulation 5 (c) (i): premises or waiting rooms for medical inspection:—

There are at present no premises set apart as a Customs examination hall, waiting rooms or rooms for medical inspection of passengers, as there are no direct passenger sailings between this port and foreign ports. Passengers who arrive by direct cargo ships from foreign ports are examined, if necessary, on board the particular ship.

Regulation 5 (c) (ii): premises for temporary isolation of persons as required by the Regulations:—

None provided.

Regulation 5 (c) (iii): Cleansing, disinfecting or disinfestation of ships, persons or clothing:—

After the removal of a case or cases of infectious disease, disinfection of the ships is carried out by the Port Public Health Inspectors. Clothing and other effects are removed to the Health Committee's Disinfecting Station, Laganbank Road, where they are subjected to steam pressure disinfection. The cleansing of persons is also carried out at this station at which suitable facilities have been provided for this purpose.

Regulation 5 (d): arrangements for reception into hospital of persons as required by the Regulations:

The Northern Ireland Hospitals Authority make provision for the reception of cases of infectious diseases at the Northern Ireland Fever Hospital at Purdysburn. Separate premises situated in the hospital grounds, but self contained and isolated from the other hospital buildings, are available for the reception of cases of smallpox.

Regulation 5 (e): ambulance transport:—The port makes use of the facilities provided for ambulance transport in the City by the N. I. Hospitals Authoritv.

Regulation 5 (f): supervision of contacts:—When contacts of infectious disease are members of the crew they are kept under supervision by the Port Medical Officer. In the case of passengers or crew landing, their destinations are ascertained. Should they proceed to a place outside Belfast, the Medical Officer of the relevant district is notified.

13 notifications regarding 45 contacts of infectious diseases were received from other Sea and Airport Health Authorities during the year.

7. Arrangements for bacteriological or pathological examination of rats for plague:—

Bacteriological and pathological examination of rats for plague is carried out by arrangement with the Director of Laboratory Services, Northern Ireland Hospitals Authority.

8. Arrangements for other bacteriological and pathological examinations:—

All other bacteriological and pathological examinations are carried out by arrangement with the Director of Laboratory Services, Northern Ireland Hospitals Authority.

9. Arrangements for the diagnosis and treatment of Venereal Diseases among sailors under international agreement:—

Upon the arrival of ships in the port, information is given to the master as to arrangements for the diagnosis and treatment of venereal disease amongst sailors. Pamphlets are left on board which give the location and time of V. D. Clinics. The pamphlets give warning of the danger of the disease. Every encouragement is given for attendance at the following clinics:—

The Royal Victoria Hospital

The Mater Infirmorum Hospital

When continuation of treatment at other ports is necessary, the sailor's Form V.44 is filled in by the Medical Officer in charge of the V.D. clinic, giving full particulars of the treatment received by the sailor.

The Belfast Harbour Commissioners have permitted the permanent display of posters issued by the Health Department containing similar warning and information regarding treatment centres in the dock side lavatories and urinals.

10. Arrangements for interment of the dead:—

All arrangements for the interment of the dead are attended to by the shipping companies.

Cases of notifiable and other communicable diseases landed from ships (including coastwise ships)

TABLE B 28

Disease	Cases during 1962		Ships concerned	Average cases for previous five years
	Passengers	Crew		
Dysentery	—	11	4	2
Influenza	—	2	2	3
Measles	1	1	2	1
Pneumonia	—	2	2	—
Tonsillitis	—	2	2	2
Tuberculosis	1	1	2	5
Eczema	—	1	1	—
Scabies	—	1	1	—

Cases of notifiable and other communicable diseases on ships but disposed of prior to arrival at the Port

TABLE B 29

Disease	Cases during 1962		Ships concerned	Average cases for previous five years
	Passengers	Crew		
Malaria	—	4	1	—
Chicken-pox	—	3	2	1

No cases of cholera, plague, relapsing fever, smallpox, typhus fever or yellow fever occurred, and no plague infected rats were discovered during the year.

V. Measures against rodents

1. Steps taken for detection of rodent plague:—

In ships in port:—All ships arriving from ports where plague is endemic are boarded by the Port Public Health Inspector as soon as possible after berthing. Enquiries are made as to the prevalence of rats on board, and as to whether any sick or dead rats were found during the voyage. The ships are then inspected to ascertain the degree of rat infestation, and are periodically inspected during the time they remain in port in order to ascertain if any dead rats have been found in the cargo.

2. Measures taken to prevent the passage of rats between ship and shore:—

All ships arriving from foreign ports are required to affix rat-guards to all moorings and maintain them so affixed during the time they are in port. It is also recommended that the gangway or other communication with the shore should be raised at least eighteen inches from the ground.

3. Methods of deratting in ships:—

(a) Eradication measures in a vessel are influenced by the extent and location of the infestation. Where such is slight and confined, trapping and warfarin baiting will suffice. In other cases fumigation with hydrogen cyanide is resorted to. The latter is carried out by authorized contractors and in accordance with the provisions of the Hydrogen Cyanide (Fumigation of Ships) Regulations (Northern Ireland) 1952 and under the supervision of the Port Public Health Inspectors.

(b) Premises in the vicinity of docks, quays, etc:—Sheds, wharves, roads and open spaces in the Belfast Harbour Commissioners' Estate receive routine warfarin baiting. Occupiers of premises within the Estate readily accede to requests for provision of rodent repressive treatment at their premises, where necessary. When necessary a written notice under the Rats and Mice (Destruction) Act, 1919 is served on the occupiers of the premises concerned.

4. Measures taken for detection of rats in ships and on shore:—

(a) In ships:—Vessels arriving in the port are inspected by the Port Public Health Inspectors and Pests Officer to ascertain the presence of rodent infestation, the extent of same or any condition which would inhibit infestation.

(b) On shore:—Sheds, stores, other buildings and structures also timber stacks and open spaces receive continual inspection.

Inspections made by Pests Officer :—

Vessels	1,310
Dockside premises, sheds, stores, timber-stacks, building and fitting-out berths, lands, etc.	1,386

5. Rat proofing:—

(a) Extent to which docks, wharves, warehouses, etc., are ratproof:—

The quaysides of docks and basins in the port are mainly of solid granite construction with ferro-concrete or granite sett surfacing.

In the case of jetties, wharves and quay extensions, some rat harbourage does exist in the under-jetty piling and frame work also in the stone facing of the river bank but the rat passage from one to the other is restricted by the sound construction of quayside surfacing. The use of concrete and/or granite setts laid on concrete in the construction of roads and shed floors ensures effective rat proofing in sheds and other dockside buildings.

(b) Action to extend ratproofing:—

(1) In ships:—Efforts are directed towards restricting free movement in vessels and preventing access to such attractive spaces as bilges for water, under ceilings, sheathing or casing for nesting and food stores. The use of tight fitting steel doors, sheet metal and expanded fine-mesh metal assures perfect protection.

(2) On Shore:—Dock-side premises receive inspection to ensure that they are maintained in sound condition against the entry and harbourage of rodents also that material favourable to harbourage and feeding is not permitted to accumulate.

Most owners and occupiers of premises in the Port area are fully aware of the damage to merchandise caused by rodents and adopt all praticable measures to prevent their entry.

Number of rats destroyed during year.

(1) On Ships:—

TABLE B 30

Species	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black.. ..	37	—	—	—	12	8	68	—	2	12	—	1	140
Brown ..	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: In addition to the above, 14 mice were destroyed.

(2) In docks, quays, wharves, warehouses etc.:—

TABLE B 31

Species	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black	3	—	2	—	—	2	—	—	—	—	—	1	8
Brown	—	4	2	—	2	6	—	6	3	4	5	4	36

In addition to above 38 mice were destroyed. The number of rats destroyed as recorded in above table were only those reported to the Port Public Health Inspectors and Pests Officer following enquiry.

Measures of rat destruction on plague "infected" or "suspected" ships or ships from plague-infected ports arriving during the year:—

No plague "infected" or "suspected" ships arrived in the Port of Belfast during the year.

Deratting Certificates and Deratting Exemption Certificates issued during the year

TABLE B 32

Net tonnage	Ships	Deratting certificates issued					De-ratting exemption certificates issued	Total certificates issued
		After fumigation with			After trapping, poisoning, etc.	Total		
		HCN	Sulphur	HCN and sulphur				
Up to 300 tons	26	—	—	—	—	—	26	26
From 301 tons to 1,000 tons	26	—	—	—	—	—	26	26
From 1,001 to 3,000 tons	16	—	—	—	—	—	16	16
From 3,001 to 10,000 tons	35	3	—	—	—	3	32	35
Over 10.000 tons	4	—	—	—	—	—	4	4
Totals	107	3	—	—	—	3	104	107

21 Vessels, where rodent infestation was slight, were serviced by trapping and baiting.

VI. Hygiene of crews' spaces:

Classification of nuisances:—

TABLE B 33

Nationality of ships	Inspected during 1962	Defects of original construction	Structural defects through wear and tear	Dirt, vermin, and other conditions prejudicial to health
British	1,383	5	188	179
Others	824	1	21	50

The defects found consisted of:—

TABLE B 34

Defects due to wear and tear to the following:	British	Others
Bilge limbers and suctions	5	—
Canopies over tea boilers	2	—
Cupboards and tables	3	—
Chopping blocks	5	—
Coffee, milk and tea boilers	2	—
Decks	18	1
Deck-head and bulkhead insulation	6	—
Drinking water filters	1	1
Drinking water tanks	1	2
Drinking water systems (chlorinated)	3	—
Flue pipes	3	—
Galley stoves	17	1
Heating systems	4	—
Heating stoves	1	1
Hold ceilings and bilge limbers	5	2
Lockers	2	—
Metal and woodwork adjoining sinks	1	—
Portlights and windows	22	2
Refrigerators (domestic and cargo)	12	2
Service pipes, hot and cold water	9	—
Scupper pipes	7	—
Shower fittings	4	—
Skylights	4	—
Soil discharges	5	—
Shell plating	1	—
Sinks	2	1
Tiling	3	—
Urinal discharges and stalls	2	1
Ventilators	2	—
Ventilation systems	6	1
Waste discharges	3	2
Wash basins	4	2
W. C. basins	10	1
W. C. flushing valves	14	2
W. C. seats	2	—
Wooden cargo pallets	2	—
Other conditions:		
Bilges required cleansing	20	3
Dock-side nuisances (soil and waste discharge from ships)	16	6
Domestic refrigerators required cleansing and painting	8	—
Food lockers required cleansing and painting	9	2
Holds deodorised	1	—
Passenger accommodation required painting	4	1
Quarters, galleys, alleyways, messrooms, storerooms and washplaces:		
Required cleansing	4	1
Required painting	20	5
Refuse on deck	5	2
Scuppers required cleansing	12	2
Sullage tanks required cleansing	3	1
Swill bins required	2	2
Tanks (drinking water) required cleansing and cement-washing	26	3
Vermin, bugs, cockroaches, flies, weevils, etc.	33	19
W. C. compartments required cleansing	11	3
W. C. compartments required painting	5	—
Totals	372	72

VII. Food Inspection:

(1) Action taken under the Public Health (Imported Food) Regulations (Northern Ireland) 1937 and 1948, the Public Health (Imported Milk) Regulations 1926, and The Preservatives in Food Regulations (Northern Ireland) 1962.

During the year cargoes of foodstuffs on board vessels, and stored in dock-side sheds and warehouses were inspected regularly for the detection of unsound food also to ascertain that the requirements of the Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948 relative to the handling and storing of foodstuffs were being complied with.

Unsound food seized or surrendered

TABLE B 35

Description	Tons	Cwts.	Qrs.	Lbs.
Aerating powder	—	3	3	22
Apple rings	—	—	1	—
Apricot halves	—	7	1	21
Biscuits	—	—	2	12
Breakfast cereals	—	2	1	15
Butter (creamery)	—	2	0	0
Butter beans in water	—	11	1	18
Cauliflower in brine	—	—	2	10
Chewing gum	—	—	—	4
Cling peaches (canned)	—	—	—	19
Cocktail gherkins, 4 × 12 gallon jars	—	—	—	—
Cultivated mushrooms	—	2	3	14
Desiccated coconut	—	3	2	20
Farina	—	2	0	0
Fruit cocktail (canned)	—	—	—	4
Fruit salad in syrup (canned)	—	9	1	1
Ginger crush	—	—	1	—
Melons	—	1	1	10
Onions	—	3	2	0
Oranges	2	1	3	14
Peach halves (canned)	—	—	—	23
Pear halves in syrup (canned)	—	1	0	0
Pear quarters in syrup (canned)	—	—	2	18
Pineapple pieces in water (canned)	—	—	2	13
Potatoes	1	13	1	20
Seedless raisins	4	7	2	24
Sliced peaches in syrup (canned)	—	—	1	12
Sliced peaches in water (canned)	1	5	2	16
Sultanas	—	2	0	0

The following informal samples taken under the Public Health (Imported Food) Regulations (Northern Ireland) 1937 and 1948 and the Preservatives in Food Regulations (Northern Ireland) 1962 were submitted to the Central Laboratory of the Northern Ireland Hospitals Authority for bacteriological examination:—

Desiccated coconut, 180 samples

and to the Public Analyst for chemical analysis:—

beef steak with gravy 1; casserole 1; granulated sugar 6; wheat flour 25; pickled onions 1; lentils 1; rice 1; split peas 1; semolina 1; farola 1; mixed pickles 1; chicken chop suey 1; sunny spread 1; fruit salad in syrup 2.

(2) Shellfish:—Information respecting any shellfish beds or layings within the area under the jurisdiction of the Port Sanitary Authority, stating whether they are, in the opinion of the Port Medical Officer, liable to pollution:—

There are no layings of shellfish within the area under the jurisdiction of the Port Sanitary Authority.

Report of any action under the Public Health (Shellfish) Regulations 1936 or the Food and Drugs Act (N.I.) 1958:—None taken.

Under the Belfast Corporation Act 1930, it is an offence to gather any shellfish within the area under the jurisdiction of the Port Sanitary Authority. Posters are exhibited in the vicinity of the Port area during the summer months warning the public against the gathering of shellfish.

Smoke observation of ships' funnels:—

Number of observations (each of 30 minutes' duration) made during the year	101
Number observed discharging black smoke over two minutes in a continuous period of 30 minutes	8
Number of statutory notices served (following observations taken by the Senior Smoke Officer)	1

Verbal notice was given by the Port Public Health Inspectors to Masters, Chief Engineers and Ships' Managers regarding the volume of dark smoke being emitted on 28 occasions.

Opportunity is taken, especially when visiting vessels using steam either in heating or power systems, to contact Chief Engineers with the view to preventing emission of dark smoke from funnels while in the Port.

Routine and other inspections, additional to those tabulated elsewhere in the Report:—

821 visits to cross-channel (passenger) vessels.

878 re-inspections regarding defects, etc.

134 inspections regarding issue of Deratting and Deratting Exemption Certificates.

FACTORIES

The health and welfare of persons employed in factories are the primary objects of the Factories Acts (N.I.) 1938 to 1959. The principal Act of 1938 contains most of the provisions which factory occupiers and owners are obliged to observe in workrooms where persons are employed by way of trade or business for the purpose of gain, and under certain circumstances workplaces or warehouses where young persons are employed come within the definition of "factory".

Under the Act of 1938, which is divided into fourteen parts containing 162 Sections and three Schedules, the Health Authority is responsible for the administration of Sections 1 to 8 (except the provision of lighting) in non-power factories with respect to maintaining workrooms, staircases and passages in a cleanly state; the washing down or re-decoration of workrooms; the overcrowding of workrooms; the securing and maintenance of a reasonable temperature in all workrooms where persons are employed; the adequate ventilation of workrooms; the removal or rendering harmless so far as practicable, all fumes, dust or other impurities that may be injurious to the health of the persons employed and the proper drainage of floors, also under Section 7, together with the Factories (Sanitary Accommodation) Regulations (N.I.) 1939, with respect to the provision and maintenance of suitable and sufficient sanitary arrangements in all factories.

Under other sections of the Act the Health Authority are responsible for securing the provision of a pure and wholesome supply of water for drinking purposes; for dealing with basement bakehouses, including the issue or withdrawal of certificates of suitability where special circumstances permit; the sanitary regulations for and the special conditions as to hygiene in bakehouses; the procedure for court action concerning any room or place used as a bakehouse which is regarded as unfit for use or occupation as such and the precautions which must be observed as to sleeping places near bakehouses. Under Part 7 of the Act, works of building construction or works of engineering construction are considered to be factories within the meaning of the Act in so far as the provision of suitable and sufficient sanitary arrangements are concerned. A register of all factories within the City is maintained by the Department and valuable assistance in keeping the register up to date is given by the Chief Factory Inspector, Ministry of Labour and National Insurance, with monthly returns of names and addresses of all new factories established and of those factories which have ceased to exist.

The following tables give particulars of the inspections made during the year under Part 1 of the Factory Act (N.I.) 1938 and an analysis of the defects which were found, with particulars of action taken. (These are also reported to the Ministry of Labour and National Insurance in accordance with the provisions of the Act).

Inspections for purposes of provisions as to health

TABLE B 36

Premises	Inspections	Notices issued	Occupiers prosecuted
Factories with mechanical power	3,918	126	1
Factories without mechanical power	184	5	2
*Other premises under the Act (including works of building and engineering construction, but not including outworkers' premises)	620	9	—
Totals	4,722	140	3

* Electrical stations reckoned as factories.

In Table B36 "Inspections for purposes of provisions as to health", there are 9 notices concerning premises other than factories. These premises are works of building and engineering construction as mentioned in Sections 111 and 112 of the Act. In addition to the above 10 intimation notices were given to contractors on the site. Some of the reports of new building operations received during the year dealt with the extension of existing premises or sites where adequate sanitary accommodation is normally available, and the need for inspection of these is correspondingly less. On new sites, however, the inspections made have been directed towards securing the provision of a sufficient number of properly equipped and screened closets. In all instances, however, where the contracts are large and the work is likely to take some time to complete, as, for example, new Corporation housing sites, waterclosets have been provided for the works; such facilities are much more satisfactory than chemical closets.

Factories on department's register at 31st December, 1962:—

Power factories	2,084
Non-power factories	365

The Chief Inspector of Factories continued to notify the Department of any matters under its jurisdiction which had come to his notice; in all, 41 such notices were received about insanitary conditions. In 14 instances where Public Health Inspectors discovered that Abstract Notices, etc., were not exhibited, the Chief Inspector of Factories was notified.

TABLE B 37

Defects	Instances	Remedied	Referred to Chief Factory Inspector	Prosecutions	Outstanding
Want of cleanliness (S.1)	52	45	—	2	7
Overcrowding (S.2)	1	1	—	—	—
Unreasonable temperature (S.3)	1	1	—	—	—
Inadequate ventilation (S.4)	4	2	—	—	2
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary conveniences (S.7):—					
Insufficient	30	28	—	1	5
Unsuitable or defective	611	579	—	—	79
Not separate for sexes	1	2	—	—	2
Other offences (excluding offences relating to homework which are reported in Table B.38)	23	11	14	—	8
Breaches of special sanitary requirements for bakehouses (Sections 56 to 59)	2	2	—	—	—
Totals	725	671*	14	3	103

* Defects remedied include defects outstanding from previous year.

The figures given in the tables dealing with visits paid to factories and defects found and remedied do not give by any means a complete picture of the work done by inspectors. Apart from those parts of the Factories Acts which are administered by District Councils, our Factory Inspectors also deal with matters which come under the provisions of the Public Health (Ireland) Acts 1878 to 1962, and the Belfast Corporation Acts 1845 to 1961, and they also see that the provisions of the Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948 are complied with in bakehouses, etc., (statistics in connection with this are given under appropriate headings in Table B39). Complaints which are received regarding factories vary widely in type, e.g., the problem of dealing with some of the very pungent smells and deposits is one which is fraught with difficulty, and in some cases the only really sure way of preventing further trouble would be to remove the factories to an area specially allocated to trades likely to create a nuisance. Apart from nuisances caused by work and processes carried on in factories, inspectors are frequently called upon to deal with complaints caused by defects in the structure of factory buildings, e.g., leaking roofs, broken and leaking eaves-spouting and other matters which might affect the health and comfort of workpeople. They are also frequently asked to deal with nuisances from the discharge of offensive effluents and with accumulations of refuse and other matters which come under the provisions of public health legislation.

Inspections of factories and workplaces under the Public Health Acts (N.I.) 1878 to 1962 and the Belfast Corporation Acts, 1845 to 1961

Nuisances discovered	111
Statutory notices issued	53
Nuisances abated	102
Dangerous structures, risk of fire, etc., reported to the City Surveyor for action	8
Special reports to City Surveyor under the Planning Acts (N.I.) 1931 and 1944	56
Plans examined concerning new work and alterations	79

Details of plans showing alterations to existing buildings or erection of new buildings to be used as factories, shops, etc.:—

Bakeries	12
Ballrooms	3
Bookmakers premises	14
Bread Shops	4
Chemists	3
Clinic	1
Dental hospital	1
Factories	4
Guest houses	2
Hairdressers	2
Hostels	2
Stabling yards	1
Offices	3
Schools	10
Shops	15
Sports pavilions	1
Warehouses	1
	79

Factory Outworkers (Homework)

Factory outworkers are persons who receive from manufacturing concerns bed linen, table linen, handkerchiefs, etc., for trimming, hemstitching and smoothing or work connected with the cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel in their own dwelling houses. It is important from a public health point of view that this work is carried on only in dwellings which are clean and wholesome and that none of the inmates of the house is suffering from any of the scheduled infectious diseases and for that purpose sections 114 to 117 of the Factories Act (Northern Ireland) 1938, require the local authority to ensure that the public is protected from such dangers. Where manufacturing concerns employ outworkers they are obliged to send their names and addresses to the local authority in whose area the outworkers reside and the local authority is required to keep a register. The returns of outworkers' premises by manufacturing concerns are made twice yearly in the months of February and August. Each day the register is checked against notifications of infectious diseases made to the Health Department and where it is found that an inmate of a dwelling house, where outwork is done, is suffering from an infectious disease, the manufacturer is directed not to send further work to that address or to remove any work from that address until it has been disinfected or declared safe by the Medical Officer of Health. The prohibited period is usually the incubation period of the infectious disease concerned, after which the work is released by the Medical Officer of Health and the firm notified. Visits are made to the homes of outworkers by Public Health Inspectors and where any unclean, verminous or overcrowded conditions are found to exist they are reported to the Medical Officer of Health who has power to make an order under the Factories Act prohibiting the sending of outwork to that address until conditions are satisfactory.

In order to keep the factory outworkers' register up to date and to assist firms employing outworkers, notifications are sent out every six months to employers known to the Department and public advertisements in the local press remind them of their obligations under the Act. Any notifications received of outworkers who reside outside the City are passed on to the Local Authority within whose area the outwork is carried on.

The following table gives details of the work carried out in this connection:—

TABLE B 38

Nature of Work	Inspections	Outwork in unwholesome premises (Section 115)			Outwork in infected premises (Sections 116/117)		
		Instances	Statutory notices served	Prose-cutions	Instances	Orders made	Prosecutions
1. Making, cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel . .	69	—	—	—	—	—	—
2. Making-up, ornamenting, finishing and repairing of table linen, or other household linen (including in the term "linen" articles of cotton and linen mixtures)	469	3	3	—	2	2	2
3. Textile weaving and any process incidental thereto	—	—	—	—	—	—	—
4. Others	—	—	—	—	—	—	—
Totals	538	3	3	—	2	2	2

Outworkers' premises within the City, notified during the year . .	574
Notices sent to factories employing outworkers	88
Notices for failing to keep or send lists of outworkers	7
Outworkers returns received	743
Outworkers notified from other districts	5
Outworkers notified to districts outside the City	259

BAKEHOUSES

These were regularly and frequently inspected with a view to maintaining a satisfactory standard of cleanliness. The statutory requirements as to painting, etc., were carried out by the occupiers where necessary. Environmental health in the baking industry both in respect of the welfare of the persons employed therein and the protection of the public is regulated by the Factories Acts (N.I.) 1938 to 1959, the Public Health Acts (N.I.) 1878 to 1962, the Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948 and the Food and Drugs Act (N.I.) 1958. There are some 241 bakeries in the City ranging from the small home bakery carried on by members of the same family to the large combine bakery employing hundreds of workers and covering acres of factory space. Over the years a reasonably good standard of hygiene has been achieved in bakehouses throughout the City. In addition to the enforcement of the general regulations, Public Health Inspectors are concerned in the inspection of all foodstuffs in storage, during preparation and after baking for soundness and general cleanliness. Particular attention is paid to the hygiene of employees which has improved generally over the past number of years. During 1962, it was found necessary to give warnings in 47 instances. Some of the larger bakeries have not yet completed all the structural alterations necessary to comply with existing hygiene regulations, but work is in progress and as the alterations are extensive and involved they can only be carried out in stages in order that the firms may continue production. Owing to the new methods of production by machinery and the high costs involved it is noticeable that the small bakehouse is rapidly disappearing, but the larger bakeries and combines continue to expand and many important improvements and enlargements of premises are under way or in the planning stage.

The following table gives particulars of the conditions found in bakehouses at the time of inspection and the action taken by the Department:—

Bakehouses on Department's register at 31st December, 1962 ..	241
Inspections during the year	1,361

TABLE B 39

Defects	Instances	Notices	Remedied	Out-standing
Want of cleanliness in food rooms	24	10	18	13
Cleanliness of persons handling foodstuffs not observed	6	6	6	—
Unreasonable temperature (ventilation inadequate or not being maintained)	4	3	5	2
Inadequate provisions for rendering fumes, etc., harmless	6	4	7	2
Inadequate provisions for drainage of floors	2	2	1	1
Drains inlets within food rooms	6	2	3	3
Sanitary conveniences communicating directly with food rooms	2	2	2	—
Ceilings, walls, floors, doors, etc., in disrepair	38	23	41	11
Preparation or cooking rooms structurally defective	19	9	20	6
Suitable and sufficient washing facilities not provided	5	3	6	2
Suitable cloakroom accommodation not provided	3	2	7	1
Cleanliness of utensils, machinery, benches, etc., not observed	14	8	14	—
Suitable and sufficient lighting not provided or not maintained	3	2	5	2
Preparation rooms overcrowded	1	1	1	—
Other defects	12	5	18	6
Totals	163	92	171*	55

* Defects remedied include outstanding defects from the previous year.

It was found necessary to institute legal proceedings against bakehouse occupiers on 3 instances, under the Public Health (Prevention of Contamination of Food) Regulations for failing to take all reasonable precautions to prevent contamination of food intended for sale. Penalties imposed amounted to £22. There were also 5 prosecutions of bakehouse occupiers under the Food and Drugs Act for selling food intended for human consumption which was unfit due to the presence of foreign matter. During the year 10 bakery premises were closed for various business reasons and 7 new bakeries were established. At the time of inspection of bakehouses it is the practice of Public Health Inspectors to examine bread delivery vehicles, bread trays and all food containers for cleanliness, etc., and to give advice on systematic washing and cleansing of such vehicles and containers. Bread vehicles are also examined in the course of their rounds. The standard of hygiene in bread delivery vehicles over the past few years has greatly improved, indeed, with some of the larger bakeries, conditions could be classed as excellent. In some instances the management sought advice from the Health Department on the use of suitable detergents and fungicidal solutions to discourage the growth of moulds. In only two instances was it found necessary to issue warnings where unsatisfactory conditions were found in bread delivery vehicles.

Bread Shops

During the year special surveys of bread shops were made in order to ascertain if the regulations respecting hygienic methods used by food handlers, condition of premises and methods of distribution were satisfactory. Where necessary advice was given to food handlers on general hygiene.

Bread shops on register at 1st January, 1962	314
Inspections..	931
Bread shops on register at 31st December, 1962	321

TABLE B 40

Defects	Instances	Notices	Remedied	Out-standing
Want of cleanliness in food rooms	3	3	4	—
Want of cleanliness of persons handling foodstuffs	1	1	1	—
Unreasonable temperature (ventilation inadequate or not being maintained)	1	1	1	—
Drain inlets within food rooms	3	2	2	1
Ceilings, walls, floors, windows, doors, etc., in disrepair	3	2	3	2
Ceilings, walls, floors, windows, doors, etc., required cleansing	8	2	6	4
Suitable and sufficient washing facilities not provided	3	3	5	1
Cleanliness of utensils, benches, food containers, etc., not observed	4	3	4	—
Other defects	3	2	6	2
Totals	29	19	32*	10

* Defects remedied include defects outstanding from the previous year.

BETTING AND LOTTERIES ACT (Northern Ireland) 1957, (amended 1959)

Under the Betting and Lotteries Act, 1957, a certificate of character can be obtained to enable a bookmaker to carry on business at a dog-racing or horse-racing course. Bookmakers licensed in the Republic of Ireland, however, are also permitted to operate on racecourses and at point-to-point meetings in Northern Ireland on payment of the appropriate licence duty. To obtain a licence the bookmaker has to apply to the County Court for a certificate of personal suitability. On the foot of such certificate a licence would be granted to him by the Ministry of Finance on payment of a duty of £25. This certificate and licence is renewable annually. To operate a bookmaker's shop a person must get a certificate of suitability for the premises concerned and must have been in business before 1st July, 1962 or exclusively as a credit bookmaker before 1st June, 1957. Some applicants succeeded on the gounds that they had been accepting bets at their homes or their place of employment. Thus a bookmaker has to pay an annual licence duty of £250. The conditions prescribed by the 1957 Act must be complied with before a bookmaker's premises can be licensed.

After 31st March, 1962 the requirement of having previously been in business no longer applies and anyone is now eligible to apply for certification and licensing. The open door policy was to have operated from 31st March, 1960, but it was postponed to 1961, and finally to 1962, because of prolonged litigation by individual bookmakers. The Act provided for the refusal of a certificate of suitability if it appears to the Resident Magistrate that there is already an adequate number of licensed offices in the locality. One of the requirements for obtaining an office licence is that the premises are owned in fee simple by the applicant or held under a lease of which at least 21 years are unexpired. The 1962 Statutory Rule and Order made under Section 36 of the 1957 Act postponed the date for coming into operation of paragraph (j) of sub-section (1) of Section 7 of the Act, from 1st April, 1962, until 1st April, 1963. This paragraph provided that the minimum nett annual value of bookmakers' premises in Belfast should be £40.

The following summary relating to bookmakers' premises does not include inspections by Public Health Inspectors or particulars of the improvements carried out in such premises as the result of action taken under the provisions of the Public Health Acts (N.I.) 1878 to 1962 and the Belfast Corporation Acts 1845 to 1961, as these matters are included under the heading of "Non-Industrial Premises".

Bookmakers' premises operating in the City	112
Applications made to the Courts for certificates of suitability	120
Certificates of suitability granted	112
Certificates of suitability refused	8
Applications withdrawn	19
Objections on public health grounds	18

NON-INDUSTRIAL PREMISES

Existing legislation authorising the inspection of offices in the City is in the Public Health Acts (N.I.) 1878 to 1962, but the wording of the Acts restricts the enforcement of up-to-date practice of environmental welfare conditions such as those contained in the Offices Act, 1960 applying to England, Wales and Scotland, which came into force on 1st January, 1962. The Act enables the making of regulations specifying standards of structure, arrangements and operation to be applied in offices for the protection of the health, safety and welfare of persons employed therein, and, in particular:—

(a) the provision of sufficient and suitable sanitary conveniences with separate accommodation for persons of each sex;
(b) the provision of adequate and suitable facilities for washing which shall include hot and cold water and soap and clean towels or other suitable means of cleaning and drying;
(c) the prevention of overcrowding;
(d) the provision of sufficient and suitable lighting in every part of the premises in which persons are working or passing;
(e) the provision of a standard of reasonable temperature;
(f) the provision of effective and suitable methods of maintaining adequate temperature;
(g) the provision of adequate and suitable accommodation for clothing not worn by employees during working hours;
(h) ensuring that all offices are kept clean;
(i) the provision of effective means of escape in the event of fire;
(j) the provision of adequate supplies of drinking water;
(k) the maintenance of adequate first aid equipment;
(l) the regular inspection and maintenance of electrical equipment; and
(m) the fencing of dangerous parts of any machinery used in offices.

I have in previous Annual Reports drawn attention to unsatisfactory conditions existing in many of the older buildings used as offices, and may I again suggest that it is important and reasonable that there should be legislation to safeguard the health, welfare and safety of such a large percentage of the working population and improve existing facilities, at least to the standards outlined above.

The following table gives particulars of the work carried out during the year in connection with the inspection of non-industrial premises.

Office buildings inspected	461
Office suites inspected	700
Inspections during the year	1,349

TABLE B 41

Defects	Instances	Notices	Remedied	Out-standing
Offices overcrowded	2	2	3	2
Offices inadequately ventilated	2	2	3	1
Offices inadequately lighted	4	4	6	1
Offices inadequately heated	8	6	5	1
Offices dirty	13	4	10	4
Stairways and passages dirty	10	6	7	3
Offices, etc., requiring re-decoration	14	9	11	3
Offices not free from noxious fumes	2	2	2	1
Offices in a damp state	12	7	10	4
Offices in a defective condition	10	5	9	3
Unsuitable provisions for taking of meals	3	3	4	—
Unsuitable or no drinking water	2	2	2	1
Unsuitable or no washing facilities	3	3	3	1
Other defects	11	6	18	7
Sanitary Accommodation:				
Insufficient	10	7	9	3
Not separate for sexes	3	2	4	—
Dirty state	44	15	40	—
No intervening ventilated spaces, screening, etc.	14	12	10	5
Defective conditions, etc.	43	14	29	19
Unsuitable urinals	3	2	4	—
Separate means of approach not provided	2	2	1	2
Other defects	7	5	8	4
Totals	222	120	198*	71

* Defects remedied include defects outstanding from the previous year.

PHARMACY AND POISONS ACT (Northern Ireland) 1955

Poisons Regulations (Northern Ireland) 1956

The duties of the Department under the above-mentioned legislation are concerned with supervision of the sale of poisons in Part II of the Poisons Schedule in shops other than chemists and pharmacists. Particular attention is paid to the sale of scheduled poisons in food shops. This usually means the sale of household disinfectants (which fall within the statutory definition of poisons) in grocers or general shops. Supervision is also exercised in case of seedsmen and hardware merchants who sell arsenical, mercurial or nicotine poisons, contained in weed killers or agricultural or horticultural insecticides.

The following is a summary of the work carried out during the year:—

Inspections	398
Applications for registration	352
Reports to Health Committee	352
Premises registered	350
Refusal of registration on grounds of unsuitability	2
Contraventions of the regulations discovered	8

RAG FLOCK ACT, 1911 AND RAG FLOCK REGULATIONS 1912

The purpose of the Rag Flock Act, 1911 and the 1912 Regulations is to safeguard public health from the use of unclean filling material in mattresses, pillows, cushions, upholstered furniture, etc. The Rag Flock Act makes it unlawful for any person to sell, or have in his possession for sale, flock manufactured from rags or to use it for the purpose of making any article of upholstery, cushions or bedding unless it conforms to a prescribed standard of cleanliness. The Act defines flock manufactured from rags as flock which has been produced wholly or partly by tearing up woven or knitted materials, whether new or old. The Regulations prescribe that the amount of soluble chlorine, in the form of chlorides, removed by thorough washing of flock with distilled water at a temperature not exceeding 25° C., shall not exceed 30 parts of chlorine in 100,000 parts of flock. Unfortunately neither Act nor Regulations prescribe any standards of cleanliness for the variety of present day filling materials used instead of rag flock nor do the Regulations cover verminous conditions.

The Department keeps a register of names and addresses of persons engaged in bedding manufacture and furniture upholstery. Visits are made by Public Health Inspectors to all these premises and regular samples of rag flock were taken for analysis by the Public Analyst. Five samples failed to comply with the standard of cleanliness. In one instance as the breach was not considered to be serious a cautionary letter was sent to the firm concerned. Legal proceedings were instituted in the other four instances.

The following is a summary of the work carried out during the year in connection with the above Act and Regulations:—

Premises on register where rag flock is used.	43
Inspections of premises	57
Samples of rag flock submitted to Public Analyst	38
Samples not in compliance with the regulations	5
Cautionary letters sent	1
Prosecutions instituted	4

SHOPS ACT (Northern Ireland) 1946

Shops are visited by Public Health Inspectors from time to time during the course of their normal duties, and all infringements are dealt with appropriately either by notice, informal intimation, or, if necessary, by Court proceedings.

The work carried out during the year indicates that regular visits are essential in order to ensure that the various requirements of the Act are observed. Many works of maintenance and improvement have been carried out which would not otherwise have been done by the responsible person. There are many owners of shop premises or businesses who prefer to wait for official action before carrying out large structural alterations. On the other hand, of course, a very considerable number of shopkeepers and property owners are not only fully co-operative, but fulfil their obligations entirely on their own initiative.

The welfare provisions of the Act dealing with sanitary conveniences, washing facilities, heating, ventilation, lighting and the facilities for the taking of meals, have been given attention during the year. Again it is apparent that continuous supervision is required in order to ensure these amenities for shop assistants are properly maintained. Whilst, in all but a few instances, the basic requirements are fulfilled, there are a number of cases in which satisfactory maintenance of the facilities would otherwise have been neglected but for periodical inspections by the department. It is, however, interesting to record that few complaints are made by shop assistants concerning the welfare arrangements provided for them, but this is not necessarily an indication that all is satisfactory. It is regrettable that some people fail to appreciate the benefits of these welfare arrangements, and thereby allow the facilities to deteriorate through neglect or misuse.

Attention is also given to alterations and additions to premises, in so far as they affect the welfare arrangements. In this connection plans are examined and any matters which do not meet the requirements of any particular legislation are brought to the attention of the appropriate person.

The following are details of the work carried out during the year under the Shops Act (N.I.) 1946:—

Number of shops on Department's register	7,634
Complete surveys	1,804
Inspections	4,124
Contraventions discovered	329
Statutory notices served	125
Exemption certificates issued with respect to alternative sanitary accommodation	27
Exemption certificates issued with respect to washing facilities ..	17

TABLE B 42

Defects	Instances	Notices	Remedied	Out-standing
Suitable and sufficient means of ventilation not provided	2	2	2	—
Suitable and sufficient ventilation not maintained	1	1	2	—
Efficient means for securing a reasonable temperature not provided	4	3	4	—
Suitable temperature not maintained	3	3	2	1
Suitable and sufficient means of lighting not provided or maintained	2	2	1	1
Insufficient or unsuitable washing facilities	38	22	28	14
Unsuitable facilities for the taking of meals	4	2	4	—
Sanitary Accommodation:				
Insufficient	3	3	5	—
Not provided separately for sexes	4	3	7	2
Ventilation inadequate	15	9	14	8
Lighting inadequate	1	1	3	—
Floors, walls, basins, seats, cisterns, etc., defective or dirty	172	96	174	27
Screening, doors, fasteners, etc., defective or not provided	4	3	6	2
Absence of an intervening ventilated space	2	2	3	1
Separate means of approach not provided	1	1	3	1
Totals	256	153	258*	57

* Defects remedied include outstanding defects from the previous year.

Inspection of Shops under the Public Health Acts (N.I.) 1878 to 1962

During the surveys made of shops by Public Health Inspectors, it is also the practice to inspect the premises for contraventions of the Public Health Acts, and local Bye-Laws made under these Acts, for such conditions as defective floors, stairways, landings, damp conditions, etc., likely to be injurious to the health of employees. Where defects are discovered statutory notices are served and followed up until the nuisance has been abated.

Public health nuisances discovered	89
Statutory notices served	51
Nuisances abated	76
Notices not complied with at 31st December, 1962	21

Fabrics (Misdescription) Act, 1913 and the Fabrics (Misdescription) Regulations (N.I.) 1959

As previously reported new Regulations came into force in 1959, to replace the 1914 Regulations, which with the passage of time had become out of date. The new Regulations were introduced mainly because certain permanent flame resistant processes were not fully developed on a commercial basis at the time of the 1914 Regulations, and there was no test of durability other than four washes with soap and water. The purpose of the Act and the present Regulations is to make it an offence to give any false description either by wording or marking, description or otherwise or by verbal representation at the time of sale that any fabric, material or garment is flame proof or flame resistant unless it complies with the prescribed tests.

The Regulations prescribe two standards, one to which fabrics must conform if they are described in terms which suggest that they are non-inflammable and a lower standard, to which all fabrics must conform if some degree of non-inflammability is claimed at the time of sale. The tests in both cases are stringent and are set out in detail in British Standard 3120 : 1959 for the performance requirements of materials for flameproof clothing and 3121 : 1959 for the performance requirements of fabrics described as of low flammability. In both tests standard washing treatments are prescribed to which fabrics must be submitted before final burning tests are carried out; the washing tests ensure that as far as possible the fabrics must retain their fire resistant properties throughout their useful life. Samples of fabrics purchased and submitted to the Textile Testing Department were certified to be in compliance with the standards of the Regulations.

FOOD AND DRUGS

This is at least as important a sector of the work of the public health inspector as any of the other sectors, embracing as it does the inspection of meat and other foods for soundness and absence of disease; the supervision of hygiene in premises where food is stored, prepared, manufactured or sold; the routine checking of all articles of food, drink and drugs to see that they satisfy standards of nature, substance and quality and that labels and advertisements are not false or misleading to the prejudice of the public. This involves constant awareness and vigilance, unsolicited search and inspection and investigation of complaints by members of the public.

The Administrative and Financial Provisions Act (N.I.) 1962 which became law on 13th February, 1962 included amendments to the Food and Drugs Act (N.I.) 1958 in relation to the sampling of milk. The effect of the amending Act is that a health authority by whose officer a sample was procured may not bring a prosecution against a purveyor unless the health authority have within (a) twenty-four hours prior to the sample being procured from the purveyor or (b) one hundred and twenty hours after the sample was procured from the purveyor, procured a sample of milk from a corresponding milking in the course or transit or delivery to the purveyor from the seller or consignor. If the sweet-milk sampled was taken from a mixture of milk produced on more than one farm further samples need not be taken by the health authority. All Grade "A" (T.T.) milk sold within the City is produced on farms outside the Belfast Corporation's area and in the majority of instances delivery is also taken outside the City Boundary. It was therefore necessary, to give effect to the provisions of the amending Act, to obtain the consent of adjoining health authorities for the Belfast Health Authority's authorised officers to exercise their powers of sampling in those areas. Application was made in December to the Antrim and Down Health Authorities and at the end of the year the Antrim Health Authority had given the necessary consent and been afforded similar facilities for their officers in the Belfast area.

In November, 1962 new regulations dealing with preservatives in food become law. The Preservatives in Food Regulations (N.I.) 1962 re-enact with amendments the Public Health (Preservatives, etc., in Food) Regulations (N.I.) 1927 to 1958. The principal changes are:—

(a) the list of permitted preservatives and of specified foods which may contain those preservatives has been extended;

(b) any food may contain not more than 5 parts per million of formaldehyde derived solely from any resin used in the manufacture of wet strength papers or plastic food containers or utensils;

(c) the skin, but not the flesh of a banana may contain nystatin; and cheese, clotted cream and any canned food may contain nisin.

The regulations also provide that a food sold or intended for sale may, if a justice of the peace so orders, be condemned and destroyed if a public analyst has certified that it contains a preservative other than one which has been permitted for use in food. Separate regulations which also came into operation on 19th November, 1962, were the Milk (Preservatives) Regulations (N.I.) 1962, which prohibit the addition of any preservatives to milk and the sale of any milk to which such addition has been made.

1962 was the first full year in which the new annual rate of food sampling of 2.5 samples per 1,000 of the City's population was applied. This accounts for the reduction in the number of samples procured compared with the previous five years. Notwithstanding this reduction, the number of samples reported as adulterated—48 —is the highest in five years and the percentage of adulterations is the highest for ten years. The Food and Drugs Inspectors procured 1,137 samples during the year and the majority of the adulterations found were in the butchers products range, i.e., minced beef, minced steak, sausages, sausage meat and a new product termed "steakettes" (subsequently re-named "sausagettes" following a prosecution). 37 of the 48 adulterated samples were of these products. The use of preservatives where not permitted was the principal reason for the samples being certified by the public analyst as adulterated. Of 127 samples of minced beef and minced steak 29 were certified as adulterated. This gives a percentage of adulteration of these products of over 16 per cent. As a check on whether the public were being served with margarine when butter was asked for as part of a meal, samples were procured from 13 cafes in the City. The Public Analyst certified that in 3 instances the fat supplied was margarine. Legal proceedings were instituted in these cases and fines amounting to £6 were imposed by the Courts. Four samples of ice-cream procured from local manufacturers did not comply with the prescribed standards as to fat content. Legal proceedings were instituted in each instance. It was the third offence over the past five years for one of the defendants, and the penalty imposed by the Courts on each occasion was £10. Other adulterations certified by the Public Analyst were in the following foodstuffs—flour, jam and Grade "A" (T.T.) milk.

The following table shows the number of samples procured and examined in the past five years and the percentage of adulterated samples:—

TABLE B 43

Year	Number taken			Number adulterated			Percentage adulterated		
	Formal	Informal	Total	Formal	Informal	Total	Formal	Informal	Total
1958	1,376	10	1,386	28	7	35	2.03	70.00	2.53
1959	1,401	5	1,406	23	1	24	1.64	20.00	1.71
1960	1,410	4	1,414	23	—	23	1.63	—	1.63
1961	1,273	12	1,285	38	3	41	2.99	25.00	3.19
1962	1,130	7	1,137	48	—	48	4.25	—	4.25

Samples of food and drugs analysed by the Public Analyst

TABLE B 44

Article	Number
Acid, acetic solution of	1
Advocaat	1
Ale, home brewed	1
Almonds, ground	1
Arrowroot	1
Baps, buttered	1
Barley	4
Beans, butter	1
Beef, minced	49
Beef, corned	1
Brandy	1
Brandy, cherry	1
Bread and butter	5
Butter	19
Butter, country	5
Butter, French unsalted	1
Butter, peanut	1
Buttermilk	19
Cakes, artificial cream	2
Cakes, fresh cream	2
Cakes, fish	2
Cake, mix, cherry almond	1
Cheese, gouda	1
Cheese, lemon	2
Cheese, parmesan	1
Cherries, glacé	2
Chicken, minced in jelly	1
Chocolate, drinking	2
Chutney, tomato	1
Cinnamon	1
Cloves	1
Cocoa	2
Codeine, linctus of B.P.	1
Coffee, instant	1
Concentrate, ginger flavour	1
Condiment, non-brewed	11
Confectionery	11
Cookies, buttered	1
Cornflour	2
Covering, chocolate cake	1
Cream, double	8
Cream, salad	3
Cream, single	1
Cream, sterilized	1
Cream, whipping	1
Cream, Zinc and castor oil	1
Crystals, foam	2
Crystals, jelly	1
Cubes, chicken stock	1
Curd, lemon	2
Cutlets, chicken and ham	1
Dates	1
Doughnuts, fresh cream	1
Dressing, French	1
Dripping	3
Eclairs, chocolate	2
Essence, coffee	1
Essence, coffee and chicory	5
Farola	2
Fat, cooking	5
Figs, syrup of	1
Fillets, chicken	1
Filling, cherry pie	1
Flan, fresh cream	1
Flavouring, vanilla	1
Flour	1
Flour, Australian	4
Flour, self raising	2
Flour, soya	1
Food, milk	1
Fruit, dried	4
Gin	2
Glucose	2
Glycerine, lemon and honey	2
Grapefruit	1
Gum, chewing	3
Ham, cooked	1
Ham, pressed	1
Herbs, asthma and bronchitis	1
Honey	5
Ice-cream	93
Jam	6
Jelly, table	6
Juice, fruit and syrup	8
Ketchup, mushroom	2
Ketchup, tomato	1
Lard	5
Lemon	1
Lentils	2
Linctus, cherry cough	1
Lollipops, iced	7
Macaroni	1
Mace, ground	1
Margarine	10
Margarine, Kosher	1
Marmalade	2
Marzipan, almond	1
Mayonnaise	1
Meat, pork luncheon	2
Milk, condensed, skimmed, sweetened	1
Milk, full cream condensed	1
Milk, full cream evaporated	4
Mincemeat, sweet	3
Mixture, cough and influenza	1
Mixture, bronchial cough	1
Mushrooms sliced in butter	1
Mustard	2
Nuts, salted cashew	1
Oil, corn	1
Oil, olive	2
Oil, Zinc and Castor	1
Ointment, boracic	1
Ointment, Zinc	3
Onions in malt vinegar	1
Onions, sliced dehydrated	1
Orange	1
Paraffin, liquid	3
Parsley, dried	1
Paste, chicken	1
Paste, fish	1
Paste, meat	1
Peas, garden	1
Peas, processed	1
Pectin, fruit	2
Peel, cut mixed	2
Pepper	1
Pepper, white	3
Peroxide, hydrogen	1
Piccalilli	2
Pies, meat	2
Pies, steak and kidney	2
Pickle, Branston	1
Pickle, sweet mustard	1
Potato, instant	1
Powder, baking	2
Powder, Boracic	1
Powder, curry	2
Powder, instant ice-cream	1
Powder, Zinc, boric and starch	1
Preserves, pineapple	1
Pudding, black	1
Pudding, rice	1
Pudding, steak and kidney	1
Rarebit, Lancashire	1

TABLE B 44 *(continued)*

Article	Number	Article	Number
Relish, corn	1	Steak, minced	127
Relish, hot dog	1	Stuffing, sage and onion	1
Relish, Yorkshire	1	Steakettes	1
Rennet, essence of	1	Suet, beef	3
Rice	2	Sugar, demerara	1
Rice, ground	2	Sweetmilk	212
Rind, watermelon sweet pickle	1	Syrup	1
Roll, artic (sponge, jam and ice-cream)	1	Syrup, maple	1
Rum	2	Syrup, milk shake	1
Sage, dried	1	Syrup, rose hip	3
Salmon	1	Syrup, white pine with tar	1
Salmon, potted with butter	1	Tablets, aspirin	1
Salt, seasoned	1	Tablets, saccharin	2
Salts, Epsom	1	Tablets, vitamin	1
Salts, grapefruit health	1	Tablets, yeast	1
Sandwiches, chicken	1	Tartar, cream of	1
Sandwich, fresh cream	1	Tapioca	2
Sauce	5	Tea	9
Sauce, cranberry	1	Tea, instant	1
Sauce, soy	1	Tomatoes, peeled	1
Sauce, instant bread	1	Turkey, minced in jelly	1
Sausages and sausage meat	209	Vermicelli, egg	1
Scones, buttered	7	Vinegar, cyder	1
Soda, bicarbonate of	4	Vinegar, malt	8
Soft drinks	18	Vinegar, malt with caramel	1
Soup and soup mix	11	Vinegar, raspberry flavour	1
Snacks, peanut butter	1	Vodka	1
Spice, mixed	2	Wheat embyro	1
Spread, cheese	3	Whiskey	7
Spread, salmon	1	Wine	1
		Yoghourt	1
		Total	1,137

TABLE B 45

Legal proceedings in respect of adulterated foods

Sample	Number	Adulterations	Prosecutions	Convictions	Fines	Costs
Beef minced	49	12	12	9	£33 0 0	£28 2 1
Bread and butter	5	1	1	1	£2 0 0	£2 2 3
Buttered baps	1	1	1	1	£2 0 0	£2 2 9
Buttered scones	7	1	1	1	£2 0 0	£2 1 6
Ice cream	93	4	4	4	£21 0 0	£9 3 8
Jam	6	1	1	—	—	£2 6 3
Sausages and sausage meat	209	7	6	5	£35 0 0	£14 2 6
Steak, minced	127	17	17	13	£47 0 0	£39 12 10
Steakettes	1	1	1	—	—	£2 5 4

Cases of adulteration in which no legal proceedings were instituted, but the owners of the food sold were cautioned by letter:—Sausages 1; Sausage Meat 1; Flour 10; Rice 1; Sweetmilk 1.

Particulars of samples specially reported by the Public Analyst during the year:—

Beef Sausages. Five samples of beef sausages contained respectively 550, 670, 930. 1,000 and 1,600 parts per million of sulphur dioxide as a preservative, while one sample, which was not declared, contained 400 parts per million. Beef sausages may contain 450 parts per million of sulphur dioxide, when declared in accordance with The Preservatives in Food Regulations (N.I.) 1962.

Buttered bread and scones. One sample described as bread and butter, and one sample described as buttered scones, were found to have been spread with margarine instead of butter, contrary to the provisions of the Food Standards (Butter and Margarine) Regulations (N.I.) 1960. Margarine instead of butter had similarly been used on a sample of buttered baps.

Canned cooked ham. One sample of canned cooked ham in a moist and partially liquified state, probably due to faulty storage conditions, was certified as inferior.

Chocolate Jamaica rum truffles. One informal sample of chocolate Jamaica rum truffles was found to contain only 0.058 per cent of alcohol, corresponding to 0.16 per cent of rum, and stated to be "made from real rum", was returned as inferior. Substitution of the words "made from real rum" by "flavoured with real rum" would seem to be more appropriate.

Flour. Seven samples of imported Australian flour contained less chalk than required under the provisions of the Flour (Composition) Regulations (N.I.) 1961. The respective deficiencies were:—23.4 per cent, 36.1 per cent, 36.1 per cent, 36.2 per cent, 57.4 per cent and 70.2 per cent of the minimum prescribed, which is 235 milligrammes per 100 grammes of flour. Three informal samples of flour of Australian origin contained amounts of iron and chalk well below the minimum stipulated by the Regulations and all three samples were also slightly low in content of vitamin B. Four samples of imported flour, slightly deficient in chalk, were returned as inferior.

Gooseberry jam. One sample of gooseberry jam contained only 63 per cent of soluble solids. Jam is required by the Food Standards (Preserves) Regulations (N.I.) 1960 to contain a minimum of 68½ per cent soluble solids.

Ice-cream. Four samples of ice-cream were deficient in fat containing respectively 3.2 per cent, 3.5 per cent, 4.2 per cent and 4.5 per cent as against the 5.0 per cent minimum required by the Ice-Cream Regulations (N.I.) 1961. One sample of ice-cream, slightly low in fat content, was returned as inferior.

Minced beef. Twelve samples of minced beef contained sulphur dioxide in amounts ranging from 100 to 860 parts per million of sulphur dioxide. Minced beef, according to The Preservatives in Food Regulations (N.I.) 1962, must not contain preservatives. Three samples of minced beef showing a trace of sulphur dioxide were returned as inferior.

Minced steak. Seventeen samples of minced steak contained sulphur dioxide in amounts ranging from 80 to 340 parts per million of sulphur dioxide. Minced steak according to The Preservatives in Food Regulations (N.I.) 1962 must not contain preservatives. Four samples of minced steak showing evidence of a trace of sulphur dioxide were returned as inferior.

Raspberry jam. One sample of raspberry jam was slightly deficient in soluble solids and was returned as inferior.

Rice. A sample of whole rice contained 0.2 per cent of foreign matter in the form of small greenish weed seeds, identified as specimens of Panicum Cruss-Galli, a non-toxic seed associated with millet.

Sausage meat. One sample of sausage meat contained 740 parts per million of sulphur dioxide as a preservative. Sausage meat may contain a maximum of 450 parts per million of sulphur dioxide, when declared, in accordance with The Preservatives in Food Regulations (N.I.) 1962. Exception was taken to the use of the description "Steak Sausage Mince" for an article containing sulphur dioxide.

Steakettes. One sample described as "steakettes" contained 10 per cent starchy matter and 300 parts of sulphur dioxide as a preservative. Any article sold under a name implying that it contains steak should not contain starch or preservatives.

Sweetmilk. One sample of sweetmilk contained 2.8 per cent of milk fat as against the minimum of 3 per cent prescribed by The Sale of Milk (Ireland) Regulations, 1901.

Demerara sugar. An informal sample of demerara sugar contained 0.06 per cent of insoluble extraneous matter, chiefly sandy crystalline mineral matter, and vegetable fibres and debris in which some residues of capsicum (or cayenne pepper) were identified. This sample was confirmed as producing a hot or burning sensation when tasted and had evidently been contaminated to a slight extent with dusty material containing pepper, and probably other spices.

Fruit salad. Two informal samples of fruit salad marked "Fruit Salad in Heavy Syrup" and "Fruit Salad in Syrup" were returned as genuine. The first can when opened showed some evidence of slight frothing. The interior of the can was, however, sound and the fruit normal in texture and taste. No metal other than tin was detected. The amount of tin found in both samples was 1.1 grains per lb. and 0.9 grains per lb. respectively. In both cases the tin content was below the recommended maximum of 2 grains per lb.

Milk Control

The essence of the law governing the sale of sweetmilk is that it must be genuine, that is, as it comes from the cow. The Sale of Milk (Ireland) Regulations, 1901 enacted that where a sample of milk contained less than 3.0 per cent of milk-fat or 8.5 per cent solids not fat, that milk should be presumed to be adulterated until the contrary is proved. Where milk contains less than 3.0 per cent of milk-fat and 8.5 per cent of milk solids not fat, it is presumed not to be genuine by reason of the removal of fat or other milk solids, or by the addition of water.

The series of tables shown in this section of the Report indicate the extent of the control exercised over milk sold within the City. The tables indicate the number of inspections of premises and the number of samples submitted for chemical analysis, bacteriological and biological examination. Comment is made under the different headings on any significant results compared with previous years.

Licensed producers of milk	4
Cows on licensed producers' premises (average)	69
Dairies where milk is pasteurised	4
Gallons of milk pasteurised per day (average)	46,500
Wholesale distributors of milk	27
Retail distributors of pasteurised milk	1,232
Retail distributors of Grade "A" (T.T.) milk	32
Inspections of dairies, cowsheds and milkshops	1,073
Samples of sweetmilk taken under Food and Drugs Act	212
Samples of sweetmilk taken for bacteriological examination ..	1,369
Samples of sweetmilk taken for biological examination	199

Particulars of sweetmilk samples procured for chemical analysis during the five years 1958-1962

Results of the samples submitted for chemical analysis show a considerable improvement over 1961 which was exceptional for reasons stated at that time. The results for 1962 follow the pattern of previous years—apart from 1961—and show a very low incidence of adulteration.

The samples procured included glasses of milk purchased in milk and snack bars.

TABLE B 46

Year	Number	Adulterated	Percentage adulterated
1958	167	—	—
1959	159	—	—
1960	196	2	1.02
1961	186	8	4.30
1962	212	1	0.47

Average monthly composition of milk samples submitted and examined by the Public Analyst

TABLE B 47

Month	Number	Total solids per cent	Fat per cent	Solids not fat per cent
January	19	12.17	3.57	8.60
February	16	12.05	3.44	8.61
March	9	11.95	3.40	8.55
April	12	12.13	3.54	8.59
May	16	11.96	3.34	8.62
June	7	11.98	3.31	8.67
July	4	12.25	3.55	8.70
August	—	—	—	—
September	2	12.30	3.70	8.60
October	7	12.47	3.67	8.80
November	43	12.47	3.79	8.68
December	77	12.39	3.75	8.64

Bacteriological and biological examination of milk

104 samples of Grade "A" (T.T.) milk were purchased and submitted to the Central Laboratory for bacteriological examination. Plate count tests were reasonably satisfactory but the coliform test results show a considerable increase in the number of samples—29—reported as unsatisfactory. The majority of these were from two producers' farms outside the City Boundary. In addition to informing the purveyors the Ministry of Agriculture were asked to investigate the causes of contamination of the milk. 907 samples of pasteurised milk were submitted for bacteriological examination and in 2 instances the phosphatase tests gave adverse results. Of the coliform tests carried out 41 were reported as unsatisfactory which was a slight improvement on the previous year. Several of the adverse results were traced to one dairy and on investigation it was discovered that large scale alterations involving the installation of new plant were taking place. The structural work was carried out when the plant was not in opeartion but it was obvious there was some risk of contamination and the firm was advised on the necessary precautions to safeguard the milk against contamination during pasteurisation operations. 199 samples of Grade "A" (T.T.) milk were submitted to the Central Laboratory for examination for the presence of tubercle bacilli.

Particulars of bacteriological and biological examination of milk

TABLE B 48

Test	Grade	Samples	Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate count	"A" (T.T.)	104	100	96.15	4	3.85
	Pasteurised	—	—	—	—	—
Coliform	"A" (T.T.)	104	75	72.12	29	27.88
	Pasteurised	907	857*	95.43	41	4.57
Phosphatase	Pasteurised	907	905	99.78	2	0.22
Biological	"A" (T.T.)	199	199	100.00	—	—
	"A" (T.T.)	199	150	75.38	49	24.62

* 9 samples of pasteurised milk were invalidated due to laboratory accident.

Provision of milk in schools

There was an increase in the number of unsatisfactory samples of milk taken by Food Inspectors from school milk for bacteriological examination. The Director of Education was informed by letter and in addition, the dairies supplying this milk under contract were visited and the plant examined with a view to the elimination of contamination.

Bacteriological examination of milk supplied to schools

TABLE B 49

Test	Grade	Samples	Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate count	Pasteurised	—	—	—	—	—
Coliform	Pasteurised	159	143	89.94	16	10.06
Phosphatase	Pasteurised	159	157	98.74	2	1.26

Mineral Waters

There were no adverse reports on the 335 samples of mineral waters submitted for bacteriological examination. The Public Analyst reported that 18 samples taken for chemical analysis were genuine.

Frozen Confectionery

There was an improvement in the results of bacteriological examination of frozen confectionery as compared with 1961. When an adverse report is received the sellers' and/or manufacturers' premises are visited by the Food Inspector and every assistance is given in locating and eliminating the sources of contamination.

The following table shows the number of satisfactory and unsatisfactory samples:—

TABLE B 50

Examined	Satisfactory	Unsatisfactory because of the presence of coliform organisms	Unsatisfactory because of the presence of coliform organisms and faecal coli
233	216	13	4

Bacteriological examination of imported eggs, egg powder and egg albumen

Samples taken for examination	58
Frozen eggs	48
Dried eggs	8
Egg albumen	2

In one sample salmonella organisms were isolated of the S. Aberdeen type. The sample was of frozen whole eggs and was obtained from a bakery in the City. After investigations at the bakery it was found necessary to seize the remainder of eggs in the container—approximate weight 28 lbs.—also a quantity of prepared pastry in which the eggs had been used. A Magistrate's Order was obtained for the destruction of the eggs and pastry. All utensils used in the manufacture of the pastry were thoroughly sterilised under the supervision of the Food Inspector.

Desiccated Coconut

Because of the association of salmonella organisms with desiccated coconut sampling is carried out at the port by the Port Public Health Inspectors and by Food Inspectors in City bakeries. In 51 samples taken in bakeries, no intestinal pathogens were isolated. The results of samples taken at the port will be found under the heading "Port Sanitary".

Merchandise Marks Acts 1887 to 1953

Merchandise Marks (Imported Goods) Orders, Made under Section 2 of the Merchandise Marks Act, 1926

The various Orders made under the 1926 Act require an indication of the country of origin on certain imported foodstuffs displayed for sale: these include apples, tomatoes, meat, bacon and ham, dried fruits, eggs, oat products, butter and poultry. The Food Inspection staff gave 67 warnings to traders during the year for contraventions of the various Orders. Warnings were unheeded in one instance and legal proceedings had to be instituted against the offending trader.

Margarine factories and wholesale dealers

Registered premises	79
Inspections	236
Contraventions discovered and remedied	6

Citrus Fruits

The Colouring Matter in Food Regulations (N.I.) 1961, prescribe permitted colouring matters and the foods in which they are permitted. Regulation 6 provides that citrus fruit may have in or upon it added approved colouring matter if (a) the words "colour added" are marked on the skin of the said citrus fruit in approved colouring matter and (b) the words are of adequate size, distinctly and legibly printed and conspicuously visible. It is an offence for any person to sell, consign or deliver any citrus fruit which does not comply with these requirements. Samples of citrus fruits submitted to the Public Analyst were found to be in compliance with the Regulations.

The Control of Food Unfit for Human Consumption

Certain of the foodstuffs listed below include exceptionally large quantities and call for some explanation. In the Table of food voluntarily surrendered, the quantity of confectionery dealt with is over 12 tons. This was the result of severe flooding in the Smithfield area of the City during September, which affected a wholesale confectioner's store. In another instance miscreants, after breaking into grocery premises, wantonly destroyed a large quantity of biscuits and pastry by using detergent sprays. Fire damage in a grocer's shop and a confectioner's produced large and varied amounts of foodstuffs all of which had to be itemised for Magistrate's Orders and subsequent insurance claims. A large quantity of frozen foods, principally different varieties of fish and shellfish, had to be destroyed. In this case a cross-channel insulated van had been delayed en route and the refrigerant had evaporated. A breakdown in the coldroom of a multiple store resulted in a large quantity of frozen foods having to be destroyed. The packers of these foods (which are perishable) advise against any attempt at re-freezing.

Comments have been made in previous Annual Reports on the large amounts of imported tinned hams which are brought to the attention of the food inspection staff. 1962 saw a worsening of the position, almost 15 tons of these hams having to be destroyed, which exceeds by far anything the Food Inspectors have had to deal with previously. Tinned hams imported from Holland seemed to be the worst affected. Liquefaction of the jelly, with the hams becoming sodden and offensive, were the principal conditions found. Bacteriological examination and chemical analysis did not reveal any possible causes. A thorough investigation into processing, transit and storage is obviously necessary. 55 fowl were seized in the public markets and in one instance involving 38 fowl claim was made that the fowl were intended for dog meat. Prosecutions were instituted and penalties were imposed by the Courts. Foreign matter in foods produced the usual crop of complaints ranging from maggots, insects, dirts, cigarette ends to a sewing needle in a potato chip and a human tooth in butter.

During the year draft Meat (Staining and Sterilisation) Regulations were circulated by the Ministry of Health and Local Government for comments by interested bodies. It is proposed that the regulations should be similar to those in force in England and Wales and contain the following provisions:—

Slaughter houses. All meat which is unfit for human consumption will be sterilised before it leaves the premises. If, however, there are no facilities for sterilising at the slaughterhouse, the regulations will enable the meat to be removed by arrangement with an authorised officer of a health authority to a place where it will be sterilised or destroyed.

Knackeries. All meat will require to be stained or sterilised before it leaves the premises.

Retailers of pet meats. When the regulations come into force retailers of pet meat will not be able to obtain unfit meat from slaughterhouses or from overseas unless it has been sterilised; if, however, any such meat should come into their possession, they will be required to sterilise it before sale. They will have to ensure that raw knacker meat is stained at the time of sale.

Other meat traders. It will be an offence for butchers and wholesalers to sell or have in their possession for sale or preparation for sale any meat which has become unfit for human consumption unless the meat has been sterilised without unnecessary delay. Whole dead animals will be excluded from the definition of meat and will consequently be exempted from the requirements of the regulations. If, however, the carcase is sent to a knackery for dressing it will become subject to the regulations.

Hospitals, medical or veterinary schools and similar institutions and manufacturing chemists will be able to obtain supplies of unstained and unsterilised meat direct from slaughterhouses, knackeries and ports of entry without restriction. Zoos, menageries, mink farms, trout farms and processors will be able to obtain supplies of such meat from these sources, provided it is transported in locked containers or vehicles appropriately marked.

Unsound foodstuffs surrendered by traders after inspection and destroyed or disposed of otherwise than for the food of man

TABLE B 51 (a)

Articles	Tins, jars, packets, cartons, bottles	Articles	Tins, jars packets, cartons, bottles
Asparagus	25	Marmalade	186
Baby food	225	Mayonnaise	9
Baking powder	6	Meat	3,913
Beans	5,824	Milk	1,056
Beetroot	113	Paste	10
Biscuits, wafers, cones	755	Peas	2,445
Cereals	85	Pickles	74
Cheese	169	Pudding	628
Cheese spread	64	Rice	1,393
Coffee	83	Salt	7
Cordial	13	Sandwich spread	3
Corn	117	Soup	6,801
Cream	184	Soup mixture	36
Fish	886	Spaghetti	289
Frozen foods	2,748	Stew	75
Fruit	12,070	Syrup	4
Fruit juice	1,480	Tomatoes	1,304
Fruit pulp	30	Tomato juice	416
Ham	437	Treacle	4
Jam	184	Vegetables	1,049
Jellies	37	Vegetable juice	29
Macaroni	221	Miscellaneous	228

TABLE B 51 (b)

Articles	Tons	Cwts.	Qrs.	Lbs.	Articles	Tons	Cwts.	Qrs.	Lbs.
Beans	—	2	2	20	Jam	—	—	1	—
Carrots	—	13	2	22	Lentils	—	2	—	—
Cheese	—	7	2	8	Margarine	—	—	—	3
Coconut (dessicated)	—	14	2	6	Meat	1	10	2	3
Confectionery	12	7	—	6	Peas	1	6	1	19
Dried fruit	—	4	2	10	Rice	—	1	—	14
Fish	—	6	3	7	Suet	—	—	1	7
Flour	—	—	3	—	Tea	—	3	1	11
Fruit	6	3	3	2	Tomato Puree	—	—	2	27
Ham	14	13	—	24	Walnuts	—	—	2	—

6,229 certificates were issued during the year in connection with unfit foods surrendered and destroyed.

Unsound food seized and destroyed in pursuance of Magistrates' Orders

TABLE B 52 (a)

Articles	No.	Container	Articles	No.	Container
Aspirin tablets	60	packets	Meat	86	tins
Beans	114	tins	Milk	36	tins
Bicarbonate of soda	72	tins	Miscellaneous	354	packets
Biscuits	103	packets	Mixed peel	12	packets
Cake mix	57	packets	Peas	145	tins
Cereal	229	packets	Pepper	30	tins
Cheese	279	packets	Puddings	240	tins
Coffee	67	tins	Rice	47	tins
Confectionery	616	packets	Sauce	82	bottles
Cream	24	tins	Soft drinks	59	boxes
Dates	24	packets	Soup	296	tins
Fish	80	tins	Soup mix	27	packets
Fruit	162	tins	Spaghetti	5	tins
Jam	129	jars	Sugar	14	packets
Jelly	24	packets	Tea	8	packets
Marmalade	80	jars	Vegetables	36	tins

20 loaves of bread, 76 pastry, 7 doz. eggs, 6 cakes, 1 doz. biscuits, 1 meat pastie, 2 slices of vegetable roll, ⅓ pt. sweetmilk, 55 fowl, 1 pork sausage, 1 coconut meringue, 4 pig's kidneys, portion of potato chips.

TABLE B 52 (b)

Articles	Cwts.	Qrs.	Lbs.
Baking powder	—	—	14
Biscuits	—	—	16
Butter	—	—	23½
Cheese	—	—	6
Cloves	1	—	—
Cooking Fat	—	1	10
Cornflour	—	—	14½
Crystallised jelly decorations	—	—	16
Dried peas	—	—	1
Flour	—	1	8
Fruit	—	1	2
Fruit (dried)	—	1	12
Ham	—	1	3
Lard	—	1	—
Lentils	—	—	5
Margarine	—	2	18
Meat	—	—	26
Rice	—	—	21
Sago	—	2	—
Sugar	—	—	13
Tea	—	—	26½
Tomatoes	—	—	12

Food containing extraneous matter

Once again there has been a considerable number of complaints received by the Department in respect of foreign matter in food, and although this may give an impression of lowering standards in hygiene with regard to manufacture and packaging of food, this is not so. The increase is undoubtedly due to the public becoming more aware of food hygiene, and that the Health Department appreciates any action they may take to bring to the notice of the Department any deterioration in the high standards now expected in food handling.

The undernoted is a list of complaints which the Department investigated during the year. The asterisk denotes instances where it was necessary to institute legal proceedings after thorough investigation by the Food Inspectors. In others warning letters to manufacturers, etc., have had the desired effect, and in some instances representatives of the firms in question have arranged to meet Department officials to discuss the complaint.

Fragment of wood in pot of jam
Insect in soda farl
Insect in sausage roll
*Foreign matter in butter
*Dirt in bottle of milk
Human tooth in butter
Dirt in bottle of milk
Mould in tin of beans
Glass in bottle of milk (2 instances)
Insect in pot of jam
*Mould in meat pastie
Mould in prepacked tea
*Piece of cloth in pork sausage
*Foreign matter in coconut meringue
*Live maggots on bacon (2 instances)
*Cigarette end in vegetable roll
Tin of stewed steak with offensive odour
Insect in potato chips
*Mould and rancidity in two chocolate marshmallow biscuits
*Mould growth on fruit cake (2 instances)
Butter with offensive odour and taste
*Mould growth in pork pie
Insect in tin of soup
Sewing needle in potato chip
Foreign matter in prepacked potato crisps
*Insect in pastry (3 instances)
Weed seed in rice
*Hairs in sponge cakes (16 instances)
*Meat roll affected with mould growths
*Insect in loaf of bread

*Pin in tea cake
Lead in coconut cake
*Fly in cream pastry
Foreign matter and offensive taste in coffee cake
Insect in wheaten farl
Carbon and discolouration in loaf of bread (2 instances)
Human hairs in cream doughnut
Wire nail in pastry
Fly in buttermilk (2 instances)

Ice Cream

Food and Drugs Act (N.I.) 1958

Ice-Cream (Composition, Heat Treatment, Labelling, etc.) Regulations (N.I.) 1961

Ice cream has become a widely used food, and in consequence its hygienic production and sale has occasioned keen trade competition. There is now a strong demand by the trade itself for the enforcement of stricter control and satisfactory standards. In Belfast, under the Food and Drugs Act (N.I.) 1958 the Health Authority is empowered to register manufacturers of and dealers in ice cream, and this has a marked effect upon the conditions of premises and the methods employed.

During the year proposed amendments to the Ice Cream Regulations (N.I.) 1961 were circulated by the Ministry of Health and Local Government for comments by interested bodies. The changes will permit the addition of sugar to a complete cold mix without requiring further heat treatment. The existing regulations require the pasteurisation or sterilisation of ice cream mixes, but exempt from this requirement the water ices and ice lollies that are acid enough to be safe from the growth of harmful organisms. They also control the cooling and freezing processes that follow heat treatment. Under the regulations a complete cold mix is a product that can be turned into an ice-cream mixture by adding water only and representations have been made that the regulations should permit the addition of sugar to the cold-mix powder after heat treatment. It is considered that there are no objections on health grounds to this step. It is proposed to amend the definition of complete cold-mix to allow the manufacturer to add sugar before he sends out the mix in airtight containers, and to permit the retailer, if he so wishes, to add sugar to the mix after he has opened the containers.

950 samples of ice-cream were procured for bacteriological examination. Whilst the results showed a decrease in the number of unsatisfactory samples classified as Grade 3, there was a considerable increase in the number of Grade 4 samples as compared with 1961. The majority of the samples so graded came from three local manufacturers and the investigations which followed revealed faults in the manufacturing plant and the cleansing and sterilising procedures. These faults were rectified and subsequent sampling gave satisfactory results. 93 samples were also submitted to the Public Analyst for chemical analysis; 4 of these were found to be adulterated due to deficiencies in fat content.

The number of registrations of premises for the sale of ice-cream continues to increase and at the end of the year was well over 1,000. In a number of instances the Food Inspectors discovered ice cream being sold in unregistered premises. Verbal warnings produced the required results in some cases, but in others legal proceedings had to be instituted where traders refused to cease selling ice-cream in premises where there was a risk of contamination.

Particulars of premises registered for the manufacture and sale of ice-cream

TABLE B 53

Particulars	Manufacture	Manufacture and sale	Sale only	Vending machines	Storage	Totals
Premises registered at 1st January, 1962	1	37	987	1	2	1,028
Deletions	—	3	86	—	—	89
Registrations	—	3	110	—	—	113
Premises on register at 31st December, 1962	1	37	1,011	1	2	1,052

Inspections	2,210
Summonses for selling ice-cream in unregistered premises	5
Samples submitted for bacteriological examination	950
Samples submitted for chemical analysis	93
Cautionary letters sent	50
Orders made by the Health Committee refusing or cancelling registration	4

Particulars of ice-cream samples taken during the year for chemical analysis

TABLE B 54

Complied with standards		Did not comply with standards			
		Fat		Total Solids	
Number	%	Number	%	Number	%
89	95.7	4	4.3	—	—

The Ice-Cream (Heat Treatment, etc.) Regulations (N. I.) 1961

Methylene Blue Test (950 samples)

TABLE B 55

Grade	Number	Percentage
1	847	89.25
2	52	5.48
3	14	1.48
4	36	3.79

Conditions discovered on inspection of ice-cream premises

TABLE B 56

Conditions	Instances	Remedied	In progress	Out-standing
Ceilings, walls, doors, windows, floors, etc., required cleansing and re-decoration	6	6	—	—
Lighting and ventilation not provided or insufficient	7	7	—	—
Failure to prevent risk of contamination of food	5	5	—	—
Sinks defective or worn, or not provided	5	4	1	—
Sanitary conveniences in or communicating direct with food room	2	2	—	—
Suitable and sufficient personal washing facilities not provided	4	4	—	—
Drain inlets within food room	1	1	—	—
Other defects	12	10	1	1
Totals	41	39	2	1

Food Hygiene

The number of visits paid by the Food Inspection staff during the year to premises in which foodstuffs intended for human consumption are sold, prepared, manufactured or stored was 24,892. All these premises, in which a multitude of different trades are carried on, must conform to the provisions of the Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948, the Belfast Corporation Acts 1930 and 1948, Food and Drugs Act (N.I.) 1958, the Shops Act (N.I.) 1946, and the Public Health Acts (N.I.) 1878 to 1962 as well as the Bye-Laws in force in relation to such premises for the observance of sanitary and cleanly conditions and practices in connection with the handling, wrapping and delivery of food sold or intended for sale for human consumption. In addition certain trades, notably those concerned with the preparation of meat, the manufacture and sale of ice-cream and the preparation and sale of fried fish and fried potatoes as well as wholesale dealers in margarine are required to be registered with the local authority. Whether large or small, all must be regularly visited by Food Inspectors to ensure that they conform to modern standards of hygiene. The standard of cleanliness of food premises visited by Inspectors has been found to be generally satisfactory. Structurally, however, there are some premises which could be further improved and the standards of the Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948, help very considerably in obtaining these improvements.

Recent designs in vehicles for street trading in foodstuffs have improved considerably from a hygienic point of view. Some of these vehicles are equipped with protective screens either of glass or other translucent material and the interiors are panelled to a flat surface, with durable and washable material. There is a strong tendency towards the use of formica type surfaces and this is welcomed. The panels are butt jointed and the joints covered with alloy strips, there being no overlapping joints or protruding ribs to make cleansing difficult. Some of the vehicles are fitted with a water tank and with bottled gas, which allows for the installation of hand-washing facilities for the operator. Openings are provided by panels of clear material so as to light and ventilate the interior and some vehicles are also provided with some form of permanent ventilation in the roof. The floor is covered with good hard wearing material which provides a lasting, durable, readily cleansed surface.

During the year proposed Slaughterhouse (Hygiene) Regulations were circulated by the Ministry of Health and Local Government for comments by interested bodies. The regulations will govern the equipment to be installed in a slaughterhouse, the admission of animals and carcases thereto and the cleanliness and hygiene of the premises and equipment. They will prescribe the manner in which slaughterhouses shall be maintained, that is, the cleanliness of all interior surfaces, sanitary conveniences, garbage and refuse disposal and lighting and ventilation. The regulations will prescribe correct slaughtering processes to be used and the procedure for the keeping and removal of meat rejected as being unfit for human consumption. Personal hygiene and conduct will also be dealt with in the regulations and any person suffering from or a carrier of any disease or infection likely to cause food poisoning must immediately give notice to the occupier or person in charge to that effect. Clothing and footwear must also be kept as clean as reasonably practicable. Refuse and by-products must be removed at least once every two days and after removal the receptacle or bay is to be thoroughly cleansed before further use. The offences and penalties are detailed and any person guilty of an offence against these Regulations will be liable on summary conviction to a fine not exceeding one hundred pounds or to imprisonment for a term not exceeding three months, or to both and, in the case of a continuing offence, to a further fine not exceeding five pounds for each day during which the offence continues after conviction. These regulations are designed to secure the observance of sanitary and cleanly conditions in the operation of slaughterhouses and the handling of meat therein.

One notable feature during the year was hotel development in the City. Plans were submitted for six new hotels and extensions to others. The new hotel proposals were for the conversion of large mansion type houses which would provide residential accommodation and facilities for functions. One requirement for licensing purposes is the provision of at least ten bedrooms and in some instances there was a tendency for this to become paramount to the detriment of other facilities required. Suitability of the proposed sanitary accommodation was in question in nearly every instance, accessibility for both residents and non-residents being the main problem rather than the actual number of sanitary conveniences required. Problems relating to the adequacy of drainage, water supplies, fire escapes, etc., also arose because the houses, originally designed for one family occupation were now to be used by much larger numbers of people. If such development is to continue, in view of the problems which have risen, consideration may have to be given to the prescription of suitable standards of accommodation.

During the year at the request of the Health Committee a comprehensive report was prepared and submitted on existing conditions in licensed premises in the City in respect to compliance with existing public health legislation. Action is being taken to remedy any contraventions discovered.

Major reconstruction works are being carried out in many of the licensed premises involving new lounge bars, improved sanitary accommodation, etc. 35 plans of proposed alterations and extensions to these premises were submitted for perusal and comment.

Several more supermarkets opened during the year and there are now many fine examples of this type of trading in the City. Increased use of refrigerated display cabinets and the washing and prepacking of vegetables and potatoes help to improve the qualities of the food and to reduce the risk of contamination. The problem of excessive handling of foodstuffs in these premises still remains despite repeated counsel to the public to refrain. Another comparatively new development is the number of food vending machines now in operation at railway and bus stations, canteens and shops within the City. These machines present special problems from a hygienic point of view and their development is being closely watched. More Chinese restaurants opened during the year and, with other restaurants specialising in continental dishes, the eating habits of the Belfast public seem to be undergoing considerable change.

The expected new Food Hygiene Regulations had not become law at the end of the year and the Public Health (Prevention of Contamination of Food) Regulations were the main instrument for securing and maintaining hygiene in food premises. The Food Inspectors in their day to day inspections of food premises give verbal warnings in such cases as lack of cleanliness of premises and person and where food is found to be stored in prohibited places, etc. Where the contraventions found involve structural works, notices are issued by the Department. 186 verbal warnings were given and in 38 instances it was found necessary to institute legal proceedings for breaches of the Regulations.

More details of the work of the Department in connection with food hygiene follow under the various sub-headings.

Details of plans showing proposed alterations to food premises

During the year 109 plans detailing proposed alterations to food premises were submitted to the Department for perusal and comment. The various types of food premises involved were as follows:—

Bottling stores	4
Butchers' shops	7
Canteens	2
Club premises	2
Coffee bars	3
Cold stores	1
Confectioners' premises	2
Delicatessen	1
Fish and chip shops	3
Fruit and vegetable shops	2
Grocers	8
Hotels	12
Ice-cream manufacturers' premises	1
Licensed premises	35
Multiple stores	2
Provision shops	1
Restaurants	8
School meals dining centres	1
Supermarkets	10
Wholesale food stores	4
	109

Inspection of food premises

Inspections by trade or business (excluding bakehouses and bread shops; details of these are recorded under the heading Factories).

TABLE B 57

Trade or Business	Inspections	Trade or Business	Inspections
Bacon curing stores	47	Markets	649
Bottling stores	18	Meat factories	88
Butchers	2,276	Milk bars	13
Chemists	30	Milk retailers	1,073
Cold stores	6	Mineral water factories	206
Confectioners	3,331	Pastry	28
Fish	474	Pet food manufacturers	58
Fish and chips	693	Pet food shops	18
Food manufacturers	113	Poultry	837
Fruiterers	1,873	Provisions	1,873
Grocers	5,613	Public houses	1,638
Hawker's carts	60	Restaurants	797
Ice cream	2,210	Wholesale stores	774
Industrial canteens	96		
Total 24,892			

Butchers' premises

Premises registered at 1st January, 1962	375
Deletions	36
Registered	47
Premises registered at 31st December, 1962	386
Summonses issued for using unregistered premises	1
Inspections	2,276

Shops Act (N.I.) 1946, Belfast Corporation Act, 1930 and bye-laws relating to Butchers' premises
Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948
Defective conditions discovered on inspection of butchers' premises

TABLE B 58

Conditions	Instances	Remedied	In progress	Out-standing
Walls, ceilings, floors, doors, etc., in disrepair	12	17	2	—
Walls ceilings, floors, doors, etc., required cleansing or redecorating	4	4	—	—
Lighting and ventilation not provided or insufficient	2	3	—	—
Sink: wastepipe untrapped or connected to drain	9	5	1	7
Sink: Hot and cold water not provided or insufficient	10	7	—	6
Drain inlets within a food room	1	1	—	1
Cold storage improperly sited	1	1	—	—
Equipment worn or defective: required repair or renewal	3	2	1	—
Refuse bin accommodation unsatisfactory	7	5	1	1
Suitable and sufficient personal washing facilities not provided	12	10	2	11
Supply of soap and clean towels not provided	17	17	—	—
Cooking ranges not provided with canopy or inaccessible for cleansing	1	1	—	—
Fixtures and fittings in a state of disrepair	2	2	—	—
Cleanliness of equipment and utensils not observed	4	3	1	—
Sink not provided for washing and cleansing utensils	2	2	—	—
Yard surface defective	5	3	—	2
Other defects	11	11	—	3
Sanitary accommodation:				
Sanitary accommodation not in compliance or not provided for each sex	2	3	—	—
Lighting and ventilation not provided or insufficient	5	4	—	1
Floors, walls, basins, seats, etc., dirty or defective	15	11	2	3
Totals	125	112*	10	35

* Defects remedied include outstanding defects from the previous year.

Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948, and Shops Act (N.I.) 1946 Defective conditions discovered in food premises (excluding butchers, ice-cream, fish and chip shops, restaurants, cafes, snack bars, canteens and licensed premises)

TABLE B 59

Conditions	Instances	Remedied	In progress	Out-standing
Ceilings, walls, doors, windows, floors, etc., in disrepair	30	25	5	2
Ceilings, walls, doors, windows, floors, etc., required cleansing and redecorating	40	30	7	9
Lighting and ventilation not provided or insufficient	15	9	—	8
Sink: Hot and cold water not provided or insufficient	24	12	10	16
Sink: wastepipe untrapped or connected direct to drain	9	5	—	5
Drain inlets within a food room	3	1	1	2
Failure to prevent risk of contamination of food	3	3	—	—
Equipment worn or defective: required repair or renewal	—	3	—	—
Fixtures and fittings in a state of disrepair	2	2	—	—
Yards having surfaces, etc., dirty or defective	2	2	1	—
Refuse bin accommodation unsatisfactory	2	—	1	2
Proper refuse bins not provided	6	5	—	1
Suitable and sufficient personal washing facilities not provided	18	14	3	1
Soap and clean towels not provided	14	14	—	—
Sanitary conveniences within or communicating direct with food room	4	4	1	3
Other defects	43	39	1	14
Sanitary accommodation:				
Not provided for each sex or insufficient	—	1	1	2
Light and ventilation not provided or insufficient	—	1	—	—
Floors, walls, basins, seats, etc., dirty or defective	14	7	2	7
Flush to watercloset basin defective or inadequate	4	4	—	1
Screens, doors, fasteners, etc., defective or not provided	—	1	—	1
Totals	238	182*	33	74

* Defects remedied include outstanding defects from the previous year.

Defective conditions discovered in restaurants, cafes, snack-bars and industrial canteens

TABLE B 60

Conditions	Instances	Remedied	In progress	Out-standing
Dining rooms: walls, ceilings, floors, etc., required cleansing	1	1	—	—
Dining rooms: lighting and ventilation not provided and maintained	2	4	—	—
Kitchens: walls, ceilings, floors, etc., in disrepair and required cleansing	3	2	1	—
Preparation rooms: walls, ceilings, floors, etc., in disrepair and required cleansing	1	2	—	—
Suitable and sufficient personal washing facilities not provided	2	3	1	—
Soap and clean towels not provided	6	6	—	—
Sink: hot and cold water not provided or insufficient	2	3	—	1
Sanitary conveniences communicating direct with food room	1	1	—	—
Drain inlets within a food room	1	1	—	—
Utensils: unsatisfactory method of cleansing	2	2	—	—
Other defects	8	8	—	—
Sanitary accommodation:				
Floors, basins, seats, walls, etc., dirty and defective	3	2	1	—
Not provided or insufficient for males	2	4	—	1
Not provided or insufficient for females	2	3	1	1
Totals	36	42*	4	3

* Defects remedied include defects outstanding from the previous year.

Defective conditions discovered in licensed premises and bottling stores

TABLE B 61

Conditions	Instances	Remedied	In progress	Out-standing
Sanitary conveniences communicating direct with food rooms	23	6	10	7
Beer cellars and bottling stores: walls, ceilings, floors, windows, etc., required cleansing	53	30	19	4
Beer cellars and bottling stores: walls, ceilings, floors, windows, etc., in disrepair	36	10	14	12
Suitable and sufficient personal washing facilities not provided	65	32	18	16
Soap and clean towels not provided	48	33	15	—
Bottle washing facilities insufficient or not provided	27	12	7	9
Drain inlets within food rooms	14	5	5	4
Bars and parlours: walls, ceilings, floors, windows, etc., in disrepair	8	3	2	4
Bars and parlours: walls, ceilings, floors; windows, etc., required cleansing	4	1	1	3
Kitchens: walls, ceilings, floors, windows, etc., in disrepair and required cleansing	2	2	—	—
Preparation rooms: walls, floors, ceilings, windows, etc., in disrepair	6	4	—	2
Preparation rooms: walls, floors, ceilings, windows, etc., required cleansing	8	5	3	—
Lighting and ventilation not provided or insufficient	20	8	6	6
Sinks: Hot and cold water not provided or insufficient	73	45	10	19
Sink: wastepipe untrapped or connected direct to drain	45	27	12	6
Fixtures and fittings in disrepair	1	—	1	—
Other defects	10	7	1	2
Sanitary accommodation:				
Not in compliance or not provided	11	4	4	4
Floors, basins, seats, walls, etc., dirty and defective	30	14	9	8
Urinals defective or inadequate	19	12	5	2
Urinals: absence of or insufficient flush thereto	23	14	6	4
Light and ventilation not provided or insufficient	12	7	3	2
Totals	538	281*	151	114

* Defects remedied include defects outstanding from the previous year.

Belfast Corporation (General Powers) Act (N.I.) 1948, and Bye-Laws made under Section 25
Registration and inspection of premises used for the business of a vendor of fried fish and fried potatoes

Registered at 1st January, 1962	203
Registered	17
Registrations cancelled	16
Registered at 31st December, 1962	204
Inspections	693

In 21 instances the Food Inspection staff discovered infringements of the above Act and Bye-Laws: 12 of these were of a minor nature and were rectified at the time of inspection. In the remainder notice was given to remedy structural defects: on subsequent visits the works required were satisfactorily carried out.

Summary of legislation under which action was taken to bring food premises into compliance

Notices issued under the various Acts and Regulations where breaches were discovered by Food and Drugs Inspectors during the year:—

TABLE B 62

Business	Public Health (Prevention of Contamination of Food) Regs.	Shops Act	Public Health Acts	Belfast Corporation Acts	Bye-Laws	Totals
Cafes, restaurants, etc.	4	1	10	—	—	15
Licensed premises	135	28	46	4	1	214
Butchers	12	3	11	—	—	26
Fish and chip shops	2	—	2	—	9	13
Ice cream premises	10	—	1	—	—	11
Bacon curing premises	2	—	1	—	—	3
Confectioners	2	—	8	1	1	12
Fish	1	—	2	—	—	3
Food manufacturers	2	—	1	—	—	3
Fruit	4	—	3	1	—	8
Grocers	36	5	33	3	3	80
Provisions shops	1	—	—	—	—	1
Wholesale stores	—	—	1	—	—	1
Totals	211	37	119	9	14	390

PESTS CONTROL

Rodents

During the past year there has been no legislative change affecting rodent control. It is still the primary responsibility of the occupier to take such steps as may be necessary and reasonably practicable for the destruction of rats and mice in or on any land and for preventing such land from becoming infested. "Land" includes any buildings or erections on land, and any cellar, sewer, drain or culvert in or under land. In the case of land not occupied by a tenant or other person occupier means the owner of the land. The chief weakness in present legislation is that owners of property occupied by tenants have no responsibility in connection with rodent infestation. This circumstance gives rise to difficulties beyond the power of the occupier to deal with. Infestations on the outer belt of the City, generally of a minor nature, were mainly due to rats harbouring in their natural environment such as banks of streams, ditches and embankments and attracted to nearby dwelling houses in search of food, the food sometimes being supplied by the occupiers of dwellings leaving bread in the gardens for birds, also rats disturbed from their natural harbourage on land developed for housing estates in some cases entered the houses during and after construction. The purpose of the Rodent Control Section is to destroy all rats and mice within the area of infestation in the shortest possible time. By so doing, the danger of infestation being maintained by the incursion of rats from adjoining buildings and lands and the natural increase by breeding is reduced to a minimum. The treatment to clear infestation is either prescribed or applied in accordance with the approved methods. All infested sites within the area are dealt with at the same time according to the block system of control. Whilst rodent campaigns are in progress the non-infested sites or premises adjoining those under treatment are examined as a precautionary measure.

The damage and contamination which could be caused by rats and mice to food supplies in stores would be almost intolerable were it not for the routine surveys and the concerted action of the occupiers of food premises, stores, etc., who in some cases notify the presence of rats or mice to the Department for the purpose of advice or assistance under the Health Committee's scheme. Generally it is found that occupiers agree to the recommendations made by the Rodent Control staff. Although 68 notices under the Rats and Mice (Destruction) Act 1919 were served, it was not necessary to institute legal proceedings for non-compliance with the requirements of the notices.

The principal method employed for rodent destruction is the use of both quick and slow acting poisons. The quick acting poisons, zinc phosphide and arsenious oxide, are used in sewers and the slow-acting poison, warfarin, is used in premises and out of doors. Warfarin has proved to be the most effective and safest rodenticide yet marketed. It is no exaggeration to say that it is a rodenticide which is capable of reducing the rodent population to an extent never before achieved. Warfarin kills rats by reducing the clotting power of their blood and by causing leakages in the small capillary blood-vessels. This leads to internal haemorrhages which, though stated to be painless, are fatal.

Co-ordinated action by district Public Health Inspectors and the Rodent Control staff was taken when required. Conditions which were likely to contribute to infestations or re-infestation were brought to the attention of the occupier of the premises or land. Preventive measures including works of rat proofing where required were carried out after disinfestation, and drains which were found defective by smoke test were repaired, usually after a statutory notice was issued on the owner of the property, except when the occupier was a lease holder.

During the year the Rodent Control staff surveyed 12,352 sites in systematic survey and in investigation of complaints, and a further 18,704 visits were made comprising operational visits and re-examination of buildings and lands. Of the 12,352 sites surveyed, 466 or about 3.7 per cent were found to be infested, details of which are shown in the statistical data. Of the 466 infestations of lands and buildings, 281 have been or were at the end of the year being dealt with by the Department's Pests Officers. Destruction measures were carried out at the Refuse Destructor, Corporation tipping grounds, Gas Works, Housing Estates and Schools.

The 31,056 recorded inspections, surveys, etc., do not include inspections made by District Public Health Inspectors under the Rats and Mice (Destruction) Act 1919 in relation to dwelling houses.

Statistical details:—

Surveys of lands and premises	31,056
Lands, premises, etc., found infested	466
Rat Infestation:—	
1. Food premises	36
2. Non-food premises	277
Mouse Infestation:—	
1. Food premises	56
2. Non-food premises	97
Premises treated by the department	264
Poison campaigns carried out for occupiers who undertook to pay costs	270
1. For rats	200
2. For mice	70
School buildings and meals kitchens treated for the Education Department	17
Poison campaigns carried out in school buildings and meals kitchens	22
1. For rats	15
2. For mice	7
Premises cleared of rats	210
Premises where the clearing process was not complete at the end of the year	54
Premises test baited	10,056
Premises wherein the occupier undertook to eliminate rats and mice on statutory or verbal notice under the Rats and Mice (Destruction) Act, 1919	174
1. Action taken by rodent destruction firms	18
(a) For rats	11
(b) For mice	7
2. Action taken by occupiers	156
(a) For rats	87
(b) For mice	69
Premises having no evidence of rats or mice at the time of survey but with rodent destruction firms on contract	138
Premises where rat proofing and other work was done to prevent re-infestation	34
Notices under the Rats and Mice (Destruction) Act 1919	68
Premises where drains were tested on complaint of rats	668
Premises where drains were defective on test for rats	129
Drains repaired	304
Drains re-laid	90
Rat destruction campaigns at corporation tipping grounds	16

Through the continued co-operation of the City Surveyor a large section of the Corporation's sewerage system was systematically treated for rats and the results show a steady decline in the rat population. Pre and test-baiting of sewers in Corporation Housing Estates at Ballymurphy, Clarawood and Highfield, where sewer treatment was carried out last year as a result of complaints of rat infestations in these Housing Estates, revealed no evidence of rat activity from the sewers at the Ballymurphy and Highfield and at Clarawood only a small number of manholes required to be poison baited out of a total of 136 manholes.

The area of the City subjected to periodical treatment against rats in sewers is bounded by:—

North—Crumlin Road, Ballysillan Road, Oldpark Road, Westland Road, Hughenden Avenue, Skegoneill Avenue, Ulster Transport Authority Railway, Corporation Street and Donegall Quay.

South—Donegall Road, Glenmachan Street, Olympia Drive, Capstone Street, Lisburn Road, Osborne Park, Deramore Park, Stranmillis Road and River Lagan.

East—Station Street, Ulster Transport Authority Railway, Holywood Road, Belmont Road, Earlswood Road, Sandown Road, North Road, Loop River, Ardenlee Avenue, Ravenhill Road, Carolan Road and Annadale Embankment.

West—Woodvale Road, Ballygomartin Road, Britton's Lane, Springfield Road, Whiterock Road and Falls Road.

This area of the City is divided into 64 sewer areas, involving the treatment of 6,074 manholes.

Rat destruction campaigns carried out in the sewerage system ..	222
Manholes treated in the sewer area	6,074
Pre baits laid	18,523
Pre baits taken	9,883
Poison baits laid in manholes	5,033
Poison baits taken by rats	4,942

Mosquito Control

The annual routine work of mosquito control within the City began on the 25th April and continued intermittently until 5th October, 1962. Control consisted of the application of waste oil and D.D.T. by the Todd Insecticidal Fog Applicator; where this treatment could not be applied control was obtained by spraying. Preliminary surveys of the potential breeding places were carried out early in the month of April and oiling by fogging followed. The following areas were subjected to fog treatment—The Bog Meadows (Donegall Road, Falls Road and Stockman's Lane); the drained pond at the Waterworks (Cliftonville Road entrance); fields and ditches adjoining Holywood Road; pond at Musgrave Park, Stockman's Lane; pond at Stranmillis Training College, Stranmillis Road; reclaimed land adjoining Ulster Transport Authority Railway, Tillysburn; swampy ground adjoining Cairnburn Road, Orangefield and Orby Road; swampy ground at Short Bros. and Harland Ltd., Sydenham; slob-land at Duncrue Street.

Other areas treated by spraying:—ditches along Ulster Transport Railway from Downview Avenue to Greencastle; ditches, etc., rear of Kirkliston Drive; ditches at Rosevale Park; drained pond at Killeen, Fortwilliam Park; swampy ground adjoining Elmgrove School, Beersbridge Road; swampy ground, etc., at Belfast Castle, Antrim Road. Garden plots at Annadale, Adelaide, Cairnburn Road, Flora Street, Larkfield Road and Westland Road were examined and water containers in which mosquito larvae were found were treated with larvicide.

During the season the suppression of mosquito breeding was satisfactorily maintained. Some of the operational points from which the Bog Meadows were treated have been intersected by the new M.1 road, but the Ministry of Home Affairs has authorised the use of the verge of the new road for the purpose of applying insecticidal fog to the retained water in the area. The pond and swampy ground near Newforge Factory, Newforge Lane were filled in and levelled and are now in grass. The pond in Musgrave Park, Stockman's Lane is in the process of being filled in.

Specimens of mosquito larvae were collected during the season and amongst the larvae which hatched out were Theobaldia Annulata, Aedes Detritus and one of the Anopheles species. All these mosquitoes have man-biting tendencies. Aedes Detritus, a salt marsh mosquito, was found at the Holywood Road and Duncrue Street areas. The larvae were not found in large numbers in any area due to the effectiveness of the control measures.

During the season the following inspections were made, treatments carried out and materials used:—

Surveys of mosquito areas	212
Areas treated with larvicide	146
Mileage run by vehicle	688
Waste transformer oil used	1,020 gallons
Larvicide used	49 ,,
Paraffin oil used	25 ,,
Petrol used by vehicle and tifa machine	124 ,,

Other Insect Pests

During the year complaints regarding various kinds of insects were investigated and complainants advised on the best methods of dealing with their problems. Treatments in special circumstances and on request from Public Health Inspectors, Health Visitors and Welfare Visitors were applied in the eradication of insects, especially bed-bugs and cockroaches. The campaign against the house fly continued, the principal target being the breeding places, and for this purpose manure pits, etc., of stabling yards and the Corporation's tipping grounds were treated from early spring until autumn. The tipping grounds required continuous attention during the year as effective control was rendered more difficult owing to the scarcity of the blinding material required for controlled tipping: the increased effort to reduce the fly population at these places was successful. Complaints were received from the occupiers of dwellings adjacent to two of the Corporation tipping grounds. During the same period 823 visits were made to food premises and advice was given on fly control and in some instances demonstrations were given of an aerosol spray specially suitable for use in most food shops for an almost immediate kill.

The treatment with insecticide for vermin in rag merchants premises continued, the costs of the treatments being recovered by agreement. Corporation owned dwelling houses were, on request of the Estates Department, disinfested of bed-bugs and fleas: this was usually done when there was a change of tenancy. During the year it was necessary to treat 36 houses for bed-bugs and 72 for cockroaches. 42 treatments were carried out to exterminate steam flies in meals kitchens.

Inspections of premises on complaint	2,374
Premises found to be infested	396
(a) Bed-bugs	36
(b) Cockroaches and steamflies	114
(c) Fleas	118
(d) Flies	100
(e) Other insects	28
Premises treated with insecticide	391
Stables and cattle yards treated	249
Rag-stores—treatments	106
Corporation tipping grounds—treatments	36
Visits to food shops and aerosol demonstrations	823

Methyl Bromide Fumigations

Number of notifications of fumigation of tobacco leaf with methyl bromide	13

(Note:—This is done in a chamber adapted specially for this purpose and constructed and operated in a manner approved by the Ministry of Home Affairs for cyanide fumigations).

The Lister-Todd Insecticidal Fog Applicator

In addition to mosquito control and the application of insecticides, the TIFA machine was used for testing of drains and sewers which could not be tested by the hand operated machine, or in cases where the smoke test revealed no defects, due to the impossibility of obtaining the necessary pressure of smoke for a satisfactory test.

Sewer and drain tests by Tifa Machine on complaint of rats ..	318

Disinfection

The Disinfecting Station, situated at Laganbank Road, is a one-storey building consisting of two separate sections—one for infected and the other for disinfected articles, with separate male and female apartments and with male and female attendants. There are two high pressure steam disinfectors installed which are supplied with steam from an electrode boiler. After the removal to hospital of patients suffering from certain infectious diseases or after the recovery of nursed-at-home patients a disinfecting service is provided for premises and bedding. Disinfection of articles is carried out at the station for Antrim and Down County Health Authorities under agreement. Second hand clothing for export is disinfected for traders on payment of the appropriate charges.

Articles disinfected at the disinfecting station:—

By steam	4,624
By formalin	390
Infected articles destroyed on request	198
Public library books withdrawn from circulation	176
Private library books withdrawn from circulation and disinfected	18
Persons bathed and disinfected at the station	43
Visits to premises where infectious disease occured	1,131
Premises disinfected	419
Mileage of vehicles in the disinfection of premises, bedding, etc. ..	4,066

Cleansing Clinic

A cleansing clinic is provided at the Disinfecting Station for the cleansing of verminous persons and for the treatment of scabies.

Persons deloused	91
Articles disinfected in connected with these	1,360
Premises disinfected	35
Treatments for scabies	287
(a) First treatment	156
(b) Subsequent treatment	131

Table B63 shows the number of persons treated for scabies at the Cleansing Clinic over the past five years:—

TABLE B 63

Year	First treatment	Subsequent treatment	Total
1958	69	47	116
1959	85	96	181
1960	123	125	248
1961	324	340	664
1962	156	131	287

Flooding

Exceptional heavy rainfall on the 11th September, 1962, which was fortunately of short duration, caused flooding in several areas of the City due to the sewers becoming gorged. There was no reported flooding of dwelling houses, although some business premises in the Smithfield area were affected. Many streets were flooded, some near the City centre. The City Surveyor's flood emergency scheme was brought into operation to help to alleviate the aftermath of the flooding.

The following table gives particulars of cases heard by the Magistrates during the year at the instance of the Department for breaches of Public Health legislation.

TABLE B 64

Act	Offences	Summonses	Orders	Fines			Costs		
				£	s.	d.	£	s.	d.
Belfast Corporation Acts 1845 to 1961	Failed to provide dustbin	3	—	1	0	0	0	8	0
	Failed to register premises as a butcher's shop	2	—	2	0	0	0	5	6
	Burning offensive substances within 100 yards from a dwelling house	1	—	5	0	0	0	5	6
	Failed to cleanse and/or repair drains	31	—	2	10	0	1	2	0
Factories Acts (N.I.) 1938 to 1959	Failed to provide a suitable sanitary convenience	3	—	6	0	0	0	11	0
Public Health (Ireland) Act, 1878; Housing (Ireland) Act 1919	Contravention of Bye-laws in respect of houses occupied by workers and let in lodgings or occupied by members of more than one family	3	—	10	0	0	0	14	0
Public Health (Ireland) Acts, 1878 to 1962	Failed to abate Public health nuisances	1,891	201	262	5	0	96	16	6
	Disobedience of Magistrates' Orders to abate public health nuisances	35	—	154	4	0	9	14	0
	Waterclosets not provided with sufficient water for flushing purposes	91	—	163	0	0	23	2	0
	Waterclosets not provided with sufficient water for flushing purposes (continuing offence)	1	—	3	0	0	0	5	6
	Bye-Laws prohibiting sale of meat until after inspection	4	—	6	0	0	2	10	0
	Refused to obey an order of a Resident Magistrate to admit a Public Health Inspector for the purposes of inspection	3	—	15	0	0	0	16	6
Merchandise Marks Act 1926 (No. 4 Order 1929)	Exposed for sale tomatoes not bearing indication of origin	1	—	0	10	0	0	7	0
Rag Flock Act 1911 Rag Flock (Ireland) Regulations 1912	Had in possession flock for purpose of making articles of upholstery which did not conform to the required standard of cleanliness	4	—	11	0	0	1	2	0
The Preservatives in Food Regulations (N.I.) 1962	Sold food containing prohibited preservatives	36	—	81	0	0	75	17	1
	Sold food containing preservatives in excess of amount allowed	5	—	34	0	0	11	11	3
	Sold food containing preservatives and failed to label same as such	2	—	1	0	0	2	11	3
Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948	Food prepared or stored in a room which communicated directly with a sanitary convenience	2	—	10	0	0	0	14	0
	Failed to keep in proper state of repair door between preparation room and yard and door of refrigerator	1	—	2	0	0	0	5	6
	Failed to finish with a hard, smooth and durable material walls and/or ceilings of rooms where food was prepared for sale	2	—	5	0	0	0	11	0
	Used room as living room in which food was stored	1	—	0	5	0	0	5	6

TABLE B 64 (*Continued*)

Act	Offences	Summonses	Orders	Fines	Costs
				£ s. d.	£ s. d.
	Failed to provide adequate washing facilities for use of persons employed in preparation of food for sale	3	—	4 0 0	0 11 0
	Failed to observe due cleanliness of rooms where food was deposited for sale	3	—	26 0 0	0 19 6
	Failed to secure cleanliness of persons employed on vehicles used in conveyance of food for sale	2	—	2 0 0	0 11 0
	Failed to secure cleanliness of cover enveloping food deposited on vehicles used in conveyance of food for sale	1	—	4 0 0	0 7 0
	Failed to secure cleanliness of person concerned in distribution of food for sale	1	—	—	—
	Failed to secure cleanliness of apparatus, utensils, etc., used in preparation of food for sale	1	—	3 0 0	0 5 6
	Failed to take all reasonable precautions to prevent contamination of food in preparation for sale	5	—	12 10 0	1 10 6
	Failed to take all reasonable precautions to prevent contamination of food by animals, dust and dirt	21	—	40 0 0	7 16 0
Food and Drugs Act (N.I.) 1958	Sold or exposed for sale food unfit for human consumption	23	—	88 0 0	12 12 6
	Adulteration of foodstuffs	6	—	11 0 0	5 15 4
	Failed to register premises for sale of ice-cream	4	—	14 0 0	1 2 0
Food Standards (Preserves) Regulations (N.I.) 1960	Food sold under such a description as to lead purchaser to believe he was purchasing jam which complied with the prescribed standard	1	—	—	2 6 3
Ice Cream (Composition, Heat Treatment, Labelling, etc.) Regulations (N.I.) 1961	Sold ice cream which was deficient in fat	4	—	21 0 0	9 3 8
Food Standards (Butter and Margarine) Regulations (N.I.) 1960	Margarine sold as butter	3	—	6 0 0	7 3 0

The training of eight student public health inspectors continued during the year. Practical training was provided in all aspects of the public health inspector's work. Theoretical training was again arranged by the Belfast College of Technology.

Six student public health inspectors were successful in passing the qualifying examination of the Public Health Inspectors Education Board and were appointed public health inspectors to fill existing vacancies in the approved establishment.

Three public health inspectors on the Corporation's Health Department staff were successful in the examination for Inspectors of Meat and Other Foods.

I wish to express my thanks to Dr. Swann, Medical Officer of Health, to all Public Health Inspectors and to the sanitary clerical staff for their help and support in all matters relating to the City's environmental health services and finally to my colleagues in other Departments for their co-operation during the year under review.

JOSEPH WALKER,
Chief Public Health Inspector

RAINFALL IN INCHES

TABLE B 64

Month	1955	1956	1957	1958	1959	1960	1961	1962
January	3.05	4.19	4.85	4.78	2.52	3.75	4.40	3.67
February	3.87	1.31	2.52	6.49	1.40	2.53	4.03	2.06
March	1.27	1.77	3.78	2.19	2.89	2.55	1.40	2.02
April	3.03	1.50	2.04	2.07	2.72	2.93	4.46	2.23
May	3.15	1.85	2.95	3.88	1.94	2.19	3.90	2.24
June	5.26	3.27	1.20	7.83	2.64	2.55	2.04	1.59
July	1.64	3.77	4.39	4.79	4.36	5.31	1.88	2.25
August	1.18	6.69	3.93	4.66	0.87	7.28	3.12	5.32
September	4.79	4.19	5.93	5.46	1.53	2.83	4.34	6.08
October	2.83	3.15	4.55	2.09	3.28	5.38	4.28	2.24
November	3.31	2.12	2.10	2.35	3.43	5.04	2.76	4.16
December	6.69	6.10	5.53	6.13	6.07	2.36	3.53	4.00
	40.07	39.91	43.77	52.72	33.65	44.70	40.14	37.86

Data supplied by the Belfast City and District Water Commissioners. Readings taken at Oldpark Station. Gauge at 200 feet O.D.

REPORT OF THE CITY VETERINARIAN FOR THE YEAR 1962

Report of the work at the Belfast Municipal Abattoir in connection with ante-mortem and post-mortem examinations of animals slaughtered for human food.

TABLE C 1

Number and description of animals slaughtered each month

	Cows	Heifers	Bulls	Bullocks	Calves	Sheep and Lambs	Goats	Pigs
January	277	453	16	4,942	48	17,049	20	506
February	212	251	21	3,871	57	11,427	98	443
March	231	204	23	4,226	60	11,521	43	535
April	217	138	4	3,770	36	11,777	38	510
May	123	152	5	2,728	30	9,927	14	527
June	149	120	1	3,719	24	16,962	14	400
July	106	92	2	4,235	61	18,321	13	350
August	170	242	1	4,275	105	16,181	20	380
September	178	196	6	4,859	110	18,955	9	472
October	376	267	2	5,728	251	26,868	2	583
November	252	258	8	5,188	120	27,578	66	527
December	135	137	5	4,697	75	21,893	34	599
	2,426	2,510	94	52,238	977	208,459	371	5,832

Total of animals slaughtered: 272,907

Compared with 1961, cattle show a decrease of 2,687; calves an increase of 423; sheep and lambs an increase of 3,521; goats an increase of 78; pigs an increase of 1,056.

TABLE C 2

Carcases condemned from all causes in 1962 compared with 1961

Description	1961	1962
Cattle	96	92
Sheep and Lambs	455	423
Goats	4	5
Pigs	139	152
	694	672

Diseased conditions which involved seizure and total destruction of carcases in 1962

TABLE C 3

	Cattle	Calves	Sheep	Goats	Pigs	Total
Abscesses	—	—	7	—	25	32
Anaemia	—	—	3	—	—	3
Cysticercus Bovis	2	—	—	—	—	2
Dropsical	—	3	12	1	—	16
Decomposed	—	3	20	—	1	24
Emaciated	—	—	1	—	—	1
Enteritis	—	2	—	—	1	3
Fevered	4	5	20	—	9	38
Gangrene	—	—	1	—	—	1
Injured	5	—	16	—	10	31
Immature	—	17	—	—	—	17
Jaundice	—	—	—	—	2	2
Joint Ill	—	6	—	—	—	6
Lymphadenitis	—	—	1	—	—	1
Neoplasms	1	—	7	—	3	11
Oedema	4	11	284	3	3	305
Pigmentation	—	—	—	—	2	2
Pyaemia	3	3	2	—	51	59
Rheumatism	—	—	—	—	2	2
Septicaemia	4	1	4	—	14	23
Septic Arthritis	—	—	—	—	3	3
Septic Mastitis	2	—	2	—	1	5
Septic Metritis	5	—	3	—	—	8
Septic Peritonitis	—	1	6	—	9	16
Septic Pericarditis	—	—	—	—	2	2
Septic Pleurisy	—	—	6	—	—	6
Septic Pneumonia	2	1	25	1	8	37
Swine Erysipelas	—	—	—	—	3	3
Toxaemia	1	—	2	—	—	3
Tuberculosis	6	—	—	—	3	9
Uraemia	—	—	1	—	—	1
	39	53	423	5	152	672

In addition to the above there were 4 tons 5 cwts. 3 qrs. 12 lbs. injured beef, 2 tons 2 cwts. 1 qr. 6 lbs. beef other causes (tuberculosis, etc.), 6 tons 12 cwts. 2 qrs. 4 lbs. mutton, 6 lbs. veal and 9 tons 10 cwts. 3 qrs. 5 lbs. pork seized as being unsound and unfit for human food.

Percentage incidence of generalised tuberculosis in animals slaughtered in 1962 compared with 1961

TABLE C 4

	1961	1962
Cattle	0.01	0.01
Calves	—	—
Pigs	0.04	0.05

(This does not include cattle slaughtered under the Attestation Scheme)

Amount of beef, mutton, pork, etc. presented for examination

TABLE C 5

Beef	3,255 sides, 2,292 quarters, 601 cuts, examined; 18 cwts. 5 lbs. seized and destroyed.
Mutton	6,834 carcases, 86 cuts examined; 24 carcases and 4 cwts. seized and destroyed.
Pork	404 carcases 1 side examined; 32 carcases, 11 cwts. 2 qrs. 15 lbs. seized and destroyed.
Veal	9 carcases examined.
Fowl	1 examined; 1 seized and destroyed.
Tinned Meat	329 examined; 329 seized and destroyed.
Fish	3 qrs. 14 lbs. cod, plaice, etc., seized and destroyed.

Fascioliasis or Liver Fluke

Liver Fluke continues to be an important menace in cattle and sheep, the average incidence for Northern Ireland in 1962 being 63.8% in cattle, and 12.0% in sheep.

Altogether in the Province 453 tons of cattle and sheep liver were condemned during the year because of this parasite. At a conservative price of 3/- per lb. this represents an economic loss of approximately £152,000.

Cysticercus Bovis

During the year cysticercus bovis infection was detected in 3.92% of all bovines slaughtered at the abattoir. Compared with the previous year 1961 this shows an increase of 0.44%.

During the year there were 2 instances in which the disease existed in a generalised form (Table C3) the parasite being widely distributed throughout the carcase musculature.

This parasite is of great importance from a meat inspection aspect as it is communicable to man if the meat is eaten in a raw or improperly cooked state, giving rise to the tape worm (Taenia saginata). The position of Belfast may be compared with 18 other abattoirs in the following table:—

Cysticercus Bovis (Northern Ireland), 1962

TABLE C 6

Abattoir	Total Kill	Affected with C. Bovis	Percentage Incidence
Newry	4,631	246	5.3
Enniskillen	4,965	235	4.7
Belfast	58,245	2,289	3.9
Downpatrick	3,901	126	3.2
Ballymena Export	8,954	228	2.5
Strabane	2,030	36	1.8
Banbridge	2,939	49	1.7
Coleraine	4,460	70	1.6
Bangor	3,910	53	1.4
Larne	3,824	34	0.9
Londonderry	7,429	42	0.6
Lisburn 5/1	1,470	8	0.5
Dunloy	2.440	12	0.5
Dungannon	6,640	28	0.4
Lurgan	12,891	55	0.4
Newtownards	4,264	14	0.3
Ballymena	8,968	17	0.2
Lisburn 5/2	411	—	—
Totals	142,372	3,542	2.5

Veterinary Laboratory

Authority for the establishment of a veterinary laboratory was granted by the Health Committee on 28th August, 1962.

It is confidently anticipated that these facilities will materially assist the work of the meat inspectors in the assessment of the suitability of meat for human consumption, and constitute an asset towards environmental sanitation in the Municipal Abattoir as well as being a source of education for all concerned.

Chest X-ray examination of Abattoir personnel

The mobile radiography service of the Hospitals Authority was utilised for Abattoir personnel on 4th April, 1962.

Arrangements have been made for this examination to be an annual one.

Occupational hazards in the meat industry

During the winter (Feb.) of 1962 some twelve cases of bovine ringworm occurred in the meat operatives (slaughtermen), one being severe enough to justify hospitalisation. A routine of personal disinfection of hands and arms at the end of each day's work was instituted, along with the provision of soap dispensers in the slaughterhalls and elsewhere and this has succeeded in reducing this hazard to negligible proportions.

On rare occasions contagious pustular dermatitis (a disease of sheep) has been seen in slaughtermen. The above measures should go a long way in the prevention of this condition.

First Aid Room

The establishment of a First Aid room with a part time attendant qualified in First Aid has proved most beneficial in a sphere where cuts of various types and other injuries are commonplace, enabling immediate and efficient dressing and thereby preventing sepsis.

Transport of Inedible Material

September, 1962, saw the introduction by the two animal by-products firms in the Province of two new vehicles possessing enclosed lockable containers. This represents a great advance in the transportation of inedible material (not condemned) from the Municipal Abattoir, this previously being carried out in open vehicles.

Transport of Edible Material

The present system whereby meat for human consumption in the City is conveyed in vehicles with open platforms is very unsatisfactory. However, forthcoming legislation will ensure that this important function will in the near future be effected in vehicles fitted with hygienic closed bodies of approved design, in which the meat will be hung.

I would like to express my sincere thanks to all my staff for their support and the efficient way they have carried out their duties.

J. F. GRACEY, Ph.D., B.Agr., M.R.C.V.S., D.V.S.M.

REPORT OF SENIOR MEDICAL OFFICER, MATERNITY AND CHILD HEALTH DIVISION, FOR THE YEAR 1962

Notification of Births Act

The total number of births notified as occurring in the area during the year was 11,878. Of these 6,053 were males, 5,823 were females and 2 were sex unknown. There were 306 still births.

TABLE D 1

Births occurring in	
Hospitals	8,927
Private nursing homes	252
Other Institutions	86
Home	2,183
Home (Hosp. district cases)	430
Total	11,878

Infant Mortality

During the year, 252 children died under the age of 12 months giving an infant mortality rate of 29. The rate for the previous year was 33.

Neonatal and Perinatal Mortality

Deaths occurring during the first month of life numbered 172 giving a neonatal mortality rate for the year of 20. The rate for the previous year was 23. The perinatal rate, i.e. stillbirths and deaths during the first week per 1,000 total births (live and still), was 41 against 44 for the previous year.

Maternal Mortality

The number of women who died from pregnancy, childbirth and the puerperal state during the year was 4 giving a maternal mortality rate of 0.46 per 1,000 live births. The rate for the previous year was 0.56. Table D13 shows the Maternal Mortality per 1,000 live births analysed according to the cause of death.

Health Visiting

53 Health Visitors were employed at the end of the year. While the routine visitation and supervision of the health of infants and young children is still the main part of their work, an ever increasing portion of their time is being spent on after-care and the follow-up of special cases. All now undertake the visitation of tuberculosis and chest cases in co-operation with the Central Chest Clinic.

Six Health Visitors are allocated to the after-care of mental cases as part of their duties and work with the Psychiatric Social Workers attached to the Mental Hospital.

One Health Visitor was attached to a group medical practice during the year and has undertaken very successfully all the various types of health visiting connected with the practice.

Regular liaison visits to hospitals are made by certain members of the staff, information exchanged being most helpful.

The Health Visitors assist the Welfare Department in the administration of the Home Help Scheme as far as expectant mothers and mothers of young children are concerned, and a close liaison is maintained with that Department on various aspects of district work.

They had the opportunity of attending refresher courses and conferences, and certain members of the Staff continued to give lectures in connection with training courses for students.

Visits paid during the year were as follows:—

(1) To expectant mothers: First visits, 1,357; Re-visits, 1,771; Total 3,128.

(2) To children under one year of age: First visits, 8,685; Re-visits, 47,001; Total 55,686.

(3) To children between 1 and 5 years: 73,966.

(4) To Tuberculosis cases, 12,950.

Ante-Natal Clinics

As the great majority of expectant mothers attending the Ante-Natal Clinics make arrangements through the clinics for their confinement in hospital the Clinic Medical Officer maintains close contact with the hospitals. At the Royal Maternity Hospital she also assists at one of the Ante-Natal sessions, and is a member of the Honorary Medical Staff.

Specimens of blood are taken for Group, Rh factor, Wasserman, etc., and arrangements are in operation whereby private medical practitioners can refer their cases to the clinics for these tests. Some medical practitioners also refer abnormal cases for a second opinion.

Instruction in Analgesia and in relaxation has been continued in combination with a special series of Mothercraft talks. These are open to all ante-natal cases irrespective of whether they are attending for ante-natal supervision or not.

Clinics and Attendances

TABLE D 2

	1st Visit	Re-Visits
Mount Street, morning	70	635
do. afternoon	119	709
Susan Street, Church Hall	78	526
Mountcollyer Street	57	434
Spier's Place, Shankill Road	100	838
Ariel Street	65	668
Cupar Street	164	1,213
	653	5,023

2,564 Blood Tests were carried out during the year.

Child Health Centres

A new clinic at Ballymurphy was opened on 1st January, and the clinic previously held in rented premises was transferred. Accommodation for 2 midwives in a self contained flat is incorporated in the building.

The number of sessions provided at the end of the year was 37 per week—15 in buildings owned by the Health Authority and 22 in others rented on a sessional basis.

As there is no alternative accommodation available in some areas a number of sessions continue to be held in very unsuitable premises.

The educational aspect of the work was kept well to the fore and special stress was again placed on the prevention of accidents.

The members of the Voluntary Workers' Association continued their help in the weighing of the babies and arranging social functions for the mothers, and our thanks are again due to them for this valuable assistance in our work.

Centres and Attendances

TABLE D 3

	Under 1 year	Over 1 year
Highfield (Monday)	1,691	617
York Street ,,	1,993	709
Ariel Street ,,	2,616	843
Bloomfield ,,	4,712	1,466
Cupar Street ,,	2,906	1,262
Donegall Road ,,	2,503	695
Knock ,,	1,482	465
Glenard (Tuesday)	2,832	942
Havelock Place ,,	3,250	865
Donegall Road ,,	2,225	647
Cupar Street ,,	2,221	674
Mount Street ,,	2,782	969
Ariel Street ,,	2,512	606
Avoca Street (Wednesday)	1,234	420
Cupar Street ,,	2,545	1,039
Ligoniel ,,	2,017	1,083
Seaview ,,	3,579	1,008
Windsor ,,	2,542	795
Mount Street ,,	2,887	1,183
Palmerston Rd. ,,	1,414	630
Susan Street ,,	2,784	1,300
Avoca Street (Thursday)	3,431	1,172
Kimberley St. ,,	3,324	1,103
Greencastle ,,	2,520	881
Mountcollyer ,,	2,311	602
Spier's Place ,,	2,529	479
Stranmillis ,,	2,711	829
Susan Street ,,	2,941	957
Mount Street ,,	3,187	1,124
Malone (Friday)	1,273	816
Ariel Street ,,	2,759	556
Cupar Street ,,	2,268	1,311
Joanmount ,,	2,495	1,260
Spier's Place ,,	2,290	529
Strandtown ,,	4,096	739
Mount Street ,,	2,214	789
Ballymurphy ,,	1,718	784
Total Attendances	94,794	32,149

Mother and Baby Homes

(Ante and Post-Natal Hostels)

TABLE D 4

Name and address of Home or Hostel	NUMBER OF BEDS						Average length of stay	
	Ante-natal	Post-natal	Labour	Isolation	Maternity (excluding labour and isolation)	Cots	Ante-natal	Post-natal
(a) Hopedene	3	11	—	—	—	11	4-6 weeks	8-9 weeks
(b) Thorndale	9	4	2	1	25	16	8-10 weeks	12 weeks

The total number of City cases admitted during the year was 32.

These hostels are in receipt of a grant from the Health Committee.

Residential Nurseries

TABLE D 5

Name and address of Nursery	Whether long stay or short stay	Number of beds provided at the end of year				
		Aged 0-9 mths.	10 mth.-2 years	Aged 2-5	Girls over 5	Boys over 5
Glendhu Hostel Holywood Road (A voluntary Hostel in receipt of a grant from the Health Committee).	Short Stay	12	8	5–10	5	5

55 children resident in Belfast were admitted to the Hostel during the year.

Communicable Diseases

TABLE D 6

	(1) Ophthalmia Neonatorum		(2) Pemphigus Neonatorum		(3) Puerperal fever		(4) Puerperal pyrexia	
	Dom. confinements	Instit. confinements	Dom. confinements	Instit. confinements	Dom. confinements	Instit. confinements	Dom. confinements	Instit. confinements
Number of cases notified during year	—	—	—	—	—	—	1	16
Number of cases visited by officers of the Local Authority	—	—	—	—	—	—	1	13
Number of cases—Home Nursing provided	—	—	—	—	—	—	—	—
Number of cases removed to hospitals	—	—	—	—	—	—	1	—

Midwives

TABLE D 7

	Domiciliary midwives	No. in inst. other than Hospitals	Midwives in hospitals	Midwives in nursing homes	Total
Total number of Midwives practising at the end of the year in the area of the Local Supervising Authority	43	17	199	7	266

Number of cases in which medical aid was summoned by a midwife during the year under Section 34 of the Nurses and Midwives Act, (Northern Ireland), 1959.

Nil

Domiciliary Midwives

23 midwives were employed on a salaried and 17 on a fee-per-case basis. Progress continues to be slow in recruiting sufficient midwives to enable the service to be placed entirely on a whole-time salaried basis. Two hostels are now in operation, one in Springfield Road and the other in Templemore Avenue. Both Hostels provide for a number of resident pupil midwives. A self contained flat is incorporated in the Child Health Clinic at Ballymurphy for 2 midwives.

The Health Committee also contributes a proportion of the expenditure of two hostels for the training of pupil midwives in conjunction with the Belfast City and Royal Maternity Hospitals.

Allowances to cover uniform, laundry and travelling are granted, the unifrom being that laid down by the Joint Nursing and Midwives Council. Equipment is issued on loan, and all drugs, dressings, etc., in use are supplied to the midwives.

Special cots, etc., for the care of premature babies are available. The trend however is for these babies to be admitted to the special nurseries attached to the two large maternity hospitals in the City.

Refresher courses are arranged from time to time.

The midwives attended a total of 2,458 domiciliary cases during the year.

Number of midwives suspended from practice during the year in order to prevent the spread of infection—nil.

Maternity Medical Services

General Medical Practitioners agreeing to provide maternity medical services in domiciliary cases are enrolled on a panel maintained in the department and are paid on a fee-per-case basis. Both the doctor and the midwife are paid by the Health Committee.

The following is a summary of the work carried out under the scheme by Medical Practitioners during the year:—

TABLE D 8

Number of domiciliary confinements at which General Practitioner attended	3,617
Number of women confined at home who were examined ante-natally	3,594
Total number of ante-natal examinations made of women confined at home	29,792
Number of women referred to institutions for confinement who were examined ante-natally	921
Total number of ante-natal examinations made of women confined in institutions	6,705
Total number of final pelvic examinations made of women confined at home	3,092
Total number of final pelvic examinations made of women confined in institutions	591
Number of cases of abortion attended	765
Number of anaesthetics given by second practitioner	24

Registration of Nursing Homes

TABLE D 9

	Number of Homes	Number of beds provided for:—		
		Maternity	Dual purposes	Total
Homes first registered during the year	—	—	—	—
Homes on the register at the end of the year	7	42	33	75

Action during 1961 :

Number of applications for registration refused	—
Number of exemptions granted	—
Number of exemptions withdrawn	—
Number of registrations cancelled	2
Number of appeals by aggrieved persons to a Court of Summary Jurisdiction	—
Number of cases in which fines were imposed	—
Number of inspections	100
Number of registered homes not inspected	—

The inspections during the year were made by the Clinic Medical Officer, the Superintendent Nursing Officer, and the Area Superintendent Health Visitors.

Deaths and Death Rates per 1,000 births of Infants under one year associated with prematurity and, in the post-natal period, associated with diarrhoea and enteritis, pneumonia, broncho-pneumonia, and bronchitis

TABLE D 10

	1953		1954		1955		1956		1957		1958		1959		1960		1961		1962	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Prematurity	84	9.85	74	8.91	78	9.62	53	6.45	91	10.8	85	10.3	90	10.8	73	8.36	97	11.0	83	9.61
Diarrhoea and enteritis	65	7.62	24	2.89	29	3.58	8	0.97	10	1.2	13	1.6	12	1.4	7	0.8	12	1.36	10	1.16
Pneumonia, broncho-pneumonia and bronchitis	56	6.57	49	5.90	35	4.32	28	3.41	26	3.1	45	5.4	34	4.1	21	2.41	34	3.86	22	2.55

TABLE D 11

Infant Mortality and Rates per 1,000 births by causes and sex

CAUSES OF DEATH	Under 1 month				1-11 months			Total under 1 year	
	Males	Females	Total	Rate	Males	Females	Total	No.	Rate
Tuberculosis of respiratory system	—	—	—	—	—	—	—	—	—
Tuberculosis, other forms	—	—	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	1	1	1	0.12
Scarlet fever and Streptococcal sore Throat	—	—	—	—	—	—	—	—	—
Syphilis and its Sequelae	—	—	—	—	—	1	1	1	0.12
Typhoid	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—
Whooping cough	—	—	—	—	2	1	3	3	0.35
Meningococcal infections	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—
Other infectious and parasitic diseases	—	1	1	0.12	—	—	—	1	0.12
Malignant neoplasms including neoplasms of lymphatic and haematopoietic tissues:									
(a) Cancer	—	—	—	—	—	1	1	1	0.12
(b) Hodgkins disease and Leukaemia	—	—	—	—	—	1	1	1	0.12
Benign and unspecified neoplasms	—	—	—	—	—	—	—	—	—
Vascular lesions affecting central nervous system	1	—	1	0.12	1	—	1	2	0.23
Non-meningococcal meningitis	—	—	—	—	—	1	1	1	0.12
Other diseases of heart	—	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—	—	—
Pneumonia	—	—	—	—	7	11	18	18	2.08
Bronchitis	—	—	—	—	1	3	4	4	0.46
Intestinal obstruction and hernia	—	3	3	0.35	1	1	2	5	0.58
Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the new born	—	—	—	—	4	6	10	10	1.16
Cirrhosis of liver	—	—	—	—	—	—	—	—	—
Nephritis and nephrosis	—	—	—	—	—	—	—	—	—
Congenital malformations	16	31	47	5.44	7	8	15	62	7.18
Birth injury, post natal asphyxia and atelectasis									
(a) with prematurity	18	6	24	2.78	1	—	1	25	2.89
(b) without prematurity	8	11	19	2.20	—	—	—	19	2.20
Infections of new born									
(a) with prematurity	1	—	1	0.12	—	—	—	1	0.12
(b) without prematurity	6	5	11	1.27	—	—	—	11	1.27
Other diseases peculiar to early infancy									
(a) with prematurity	31	26	57	6.60	—	—	—	57	6.60
(b) without prematurity	4	—	4	0.46	—	—	—	4	0.46
All other diseases	1	2	3	0.35	12	4	16	19	2.20
Accidents	—	—	—	—	4	1	5	5	0.58
Unknown causes	—	—	—	—	—	—	—	—	—
Homicide and operations of war	—	1	1	0.12	—	—	—	1	0.12

TABLE D 12

Infant Mortality (By Age Groups)

Sex	Under 1 day	1-6 days	1-3 weeks	1 month	2 months	3-5 months	6-11 months	Total	Deaths of Illegitimate children
Males	43	29	14	9	4	21	6	126	5
Females	47	22	17	7	3	16	14	126	1
Total	90	51	31	16	7	37	20	252	6

TABLE D 13

Maternal Mortality Rate per 1,000 live births according to cause of death

Cause of Death	No. of Deaths	Rate per 1,000 live births
1. Air embolism due to syringing of the Uterus to induce abortion	1	0.12
2. Massive liver necrosis	1	0.12
3. Pulmonary embolism	1	0.12
4. (1) Shock due to amniotic fluid embolism	1	0.12
(2) Post partum haemorrhage, afibrinogenaemia		

TABLE D 14

Infant and Neo-Natal Mortality Rates, 1885—1962

Year	Rate per 1,000 births		Year	Rate per 1,000 births	
	Infant	Neo-Natal		Infant	Neo-Natal
1885	170	—	1950	49	25
1890	162	—	1951	44	24
1895	169	—	1952	47	25
1900	152	—	1953	45	21
1905	136	—	1954	39	24
1910	143	—	1955	37	21
1915	137	—	1956	29	18
1920	132	—	1957	32	22
1925	104	—	1958	30	19
1930	78	—	1959	33	22
1935	112	—	1960	28	20
1940	122	40	1961	33	23
1945	84	40	1962	29	20

— indicates information not available

Home Nursing Service

The Home Nursing Staff consists of 1 Superintendent, 1 First Assistant Superintendent, 1 Second Assistant Superintendent and 47 Queen's Nurses, 3 State Registered Nurses and 2 State enrolled Nurses.

There were 15 nurses in training during the year. 9 were Departmental candidates and 4 were County candidates. The training remains at a high standard and several of the candidates obtained credits in various subjects at the examination.

The total number of visits paid during the year was 200,237 compared with 205,105 in 1961.

Sick room requisites such as Dunlopillo mattresses, air cushions, bed-rests, rubber sheeting, bed-pans, etc., are sent out to patients on loan when required through the Medical Comforts depot.

Home Nursing Service
Statistics of Work Done, 1962

TABLE D 15

A.	Number of Cases:—		
(i)	Brought forward from 1961		1,482
(ii)	New cases taken on during 1962		3,722
	Analysis of new cases:—		
	Tuberculosis	67	
	Cancer	196	
	Diabetes	49	
	Gynaecological	19	
	Pneumonia	20	
	Surgical	650	
	General medical	2,721	
(iii)	Removed during 1962		2,962
	Cause of removal:—		
	Convalescent	1,616	
	Died	395	
	To hospital	586	
	Other causes	365	
	Remaining on books at end of 1962		2,242
B.	Analysis of visits to all cases in 1962:—		
	Tuberculosis	5,666	
	Cancer	10,995	
	Diabetes	19,638	
	Gynaecological	561	
	Pneumonia	280	
	Surgical	28,438	
	General medical	134,659	
	Total visits	200,237	

After-Care

The Committee's scheme for dietetic assistance includes domiciliary as well as ex-hospital cases. Assistance is given for a period of six weeks during which time the National Assistance Board, to whom each case is referred, arranges for its continuance from central funds if necessary. The total number of cases dealt with was 579. Women over 60 and men over 65 excluded from the scheme are the entire responsibility of the National Assistance Board.

The transfer of the function of the Northern Ireland Tuberculosis Authority extended the scheme to those persons recommended by chest physicians and one pint of milk is supplied daily. During the year 1,047 persons received milk under the scheme. Cases are reviewed periodically by the chest physician who recommends the continuation or cessation of supplies.

During the year 910 new issues of medical comforts were made and 582 persons returned loaned equipment. The number holding equipment at the end of the year was 752.

Chiropody

A scheme for providing chiropody treatment for the aged, handicapped persons, and expectant and nursing mothers was introduced in 1961. At the beginning one session was held weekly, but with the rapid growth of the work it was found necessary to increase the number of sessions, and also provide for domiciliary visits. At the end of 1962 fifteen sessions were being held weekly.

A total of 1,561 persons received treatment; and the number of treatments carried out was 5,152, 4,935 at clinics and 217 in patients' homes.

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Belfast Grant-Aided Schools

The various types of grant-aided school within the Belfast County Borough are shown in Table E1. All pupils attending these schools are examined under the provisions of Section 42 of the Education (Amendment) Act (N.I.), 1956. These examinations are carried out by the School Health Service, except at the three non-participating voluntary secondary schools who conduct their own schemes of medical and dental inspections and treatment under Section 42 (6).

The school population of 81,366 is about the same as last year. The county primary schools show a reduction in number to 67 during 1962; Ashmore St. Junior, Mayo St., and Queen Victoria schools were closed; Greenwood Infants' was opened, and John White Junior was renamed Glenwood Junior. The county secondary schools are reduced to 18 with the closing of the Technical High School. Glenwood Girls' Secondary School was renamed Glencairn Girls' Secondary on transferring to their new premises at Lyndhurst Gardens, Ballygomartin Road. Malcolm Sinclair House, the special nursery school for physically handicapped pupils, ceased to be a voluntary school on transfer to the Belfast Education Authority on 1st September, 1962.

Staff

Throughout 1962 our staff of medical officers remained at full strength. The Hospitals Authority provides specialist services by secondment on a sessional basis; this year a paediatrician worked part time in our clinics and special schools, and an orthopaedic surgeon began to give regular sessions to Fleming Fulton School from October. Several ophthalmic specialists were seconded part time throughout the year, but the sessions given were considerably less than our requirements, and the waiting-list for refractions has become unduly long.

The Hospitals Authority also provides speech therapy up to eleven sessions per week in our clinics and schools; they were unable to do this for the first nine months of 1962 owing to shortage of therapists. We also had three vacancies on our permanent staff of speech therapists throughout 1962.

There were resignations and appointments of physiotherapists and occupational therapists during 1962, leaving us for most of the year with a vacancy in each of these departments.

The health visitor staff was at full strength. One nurse was seconded to the Health Visitors Training Course of the Royal College of Nursing, and was replaced for the duration of the course by a temporary appointment.

School Medical Inspections

Table E2 shows the various medical inspections carried out in 1962. The expected legislation authorising different methods of medical inspection did not appear during this year, and we continued to inspect pupils in the statutory age groups, concentrating on Group I (entrants). The majority of Group III and Group IV (leavers) were also examined. In Group II 1,725 children were examined. We no longer attempt to examine this group in full, and those examined consist partly of late entrants to school, partly of children who missed their entrants' inspection owing to illness, migration, or other causes, and partly of children examined rather early for Group III. These latter children, although not yet quite 10 years old, have reached the classes normally made up of Group III pupils; teachers greatly prefer that we examine a whole class rather than select the children from several classes.

Table E2 shows also the numbers of children examined at the special request of their teachers, and the numbers re-examined to follow the course of defects found on previous occasions. In addition to the 31,106 examinations recorded in the table, all the 943 handicapped pupils at special schools or on home tuition were examined during the year, some of them many times. The findings in these handicapped pupils are excluded from the various tables of defects, but particulars of their handicaps are given in Tables E13 and E16 to E22.

Table E12 shows that 14,734 children were re-examined in 1962 for 18,949 defects, of which 3,679 required further treatment, 4,630 were removed from the list as cured, and the remaining 10,640 were listed for further observation.

Table E11 shows the action found necessary by the examining doctor at routine medical inspections and Table E3 shows the attendance of parents at these inspections.

Defects discovered at Routine Medical Inspection

Table E7 summarises the defects found at routine medical inspections in 1962. The numbers of children per thousand found to have the various defects are for the most part similar to previous years. There is, however, a reduction in the number per thousand children examined having ear, nose, and throat troubles from 117 in 1961 to 96 in 1962, and the incidence of enlarged cervical glands was reduced from 13 per thousand to 6 per thousand.

Table E4 shows the ages and mean heights and weights of the 18,176 children given routine medical inspections.

At routine inspections the doctor inquires about smallpox vaccination and looks for a scar of successful vaccination. Table E5 shows that in about 30% of boys and girls of all ages no evidence of vaccination can be seen.

Table E6 shows the examining doctors' assessment of the nutritional state of the children given routine inspection. Very few children are now found to be badly nourished and in many of these the trouble arises from an illness such as coeliac disease rather than lack of food to eat.

Table E8 shows the visual acuity of children examined at routine medical inspections and Table E9 the defects of colour vision. We test the colour vision of the older children using the Ishihara method.

Tuberculin Tests and B.C.G. Vaccinations

Table E10 shows the results of tuberculin testing by the Heaf multiple-puncture method at routine medical inspections. Part (a) of the table is confined to children not previously vaccinated with B.C.G. and gives a measure of the naturally acquired positive tuberculin reactions in Belfast children. Children are not usually offered the test until about 10 years of age, since our aim is to vaccinate the ten-year-olds whose reaction is negative; the 931 nine-year-olds offered the test this year consist of children approaching their tenth birthday. A few children aged 5 to 8 years were tested for clinical reasons; they showed signs or gave a history which required tuberculosis to be ruled out. Some children older than the 10—12 year age group were offered the Heaf test. These consist largely of children whose co-operation was not obtained on previous occasions.

Of the 3,955 unvaccinated children tested 14.3% gave positive reactions, a higher percentage than in 1961. There has been a steady reduction in the percentage of positive reactions until this year; the figures for the years 1957 to 1961 were 16.6, 15.4, 12.9, 12.5, and 11.7%.

Part (b) of the table shows the results of retesting 1,641 children who had been vaccinated with B.C.G. on various dates ranging up to about ten years earlier. Over 97% of these gave positive reactions, the remainder having failed to convert to positive reaction at the time of vaccination or having reverted to negative reaction as time passed. The duration of the protection afforded by B.C.G. vaccination is still uncertain, but the high percentage of positive reactions in these children encourages us to think that it probably lasts for many years, and possibly throughout childhood for those vaccinated in infancy.

During 1961 our doctors vaccinated 3,739 children with B.C.G. Returns are made to us of Belfast residents of any age given B.C.G. vaccination by other authorities; these amounted to 1,953 for the year.

History of Infectious Diseases

At routine medical inspections the parent of each child is asked to complete a questionaire. Among other questions the parent is asked to indicate which of the commoner infectious diseases the child has had, and Table E15 shows the answers. The numbers of children to whom these percentages apply is shown in Table E2.

Handicapped Pupils

The Handicapped Pupils and Special Schools Regulations (N.I.) 1957 define ten categories of educational handicap. Section 30 of the Education Act (N.I.), 1947, the latest version of which is found in the Education (Amendment) Act (N.I.), 1956, directs that all handicapped children over the age of two years shall be found and given suitable special educational treatment.

Table E16 shows the numbers of educational handicaps affecting Belfast children. This is a constantly changing kaleidoscopic picture with new handicaps arising throughout the year from illness or accident, while some children improve to the point where they are no longer handicapped. Handicapped infants are dealt with by the Maternity and Child Health Division until they reach two years of age, when we add them to our list and remove from the list those children who are over the handicapped school-leaving age of 16 years, unless arrangements are made for their education to continue. Some children are handicapped only temporarily, perhaps spending several months at home in plaster after a fracture, and having home tuition from one of the travelling teachers. Our records for these children include a punch-card system whereby we keep up to date with these and many other changes, and from which we can extract quickly any statistical information needed. Tables E13 and E16 to E22 relate the position at 31st December, 1962.

Unfortunately many children have several handicaps each of which if it existed alone would need special educational treatment, and often the need for different types of treatment is present in the same child. In these circumstances it is necesssary to reckon in terms of handicaps as well as of pupils, and Table E16 indicates how 4,764 handicaps are distributed among 4,069 children. The last column of Table E16 gives the numbers of boys and girls who have each type of handicap; adding this column gives a total of handicaps and not of children, since many children appear several times in the table. For example, this table shows 7 boys and 12 girls who are blind. We see from Table E17 that in 16 of these children blindness is the only handicap; Table E18 shows that one is also partially deaf and one educationally subnormal, while Table E19 shows the remaining blind child to be also partially deaf, educationally subnormal, and epileptic. Provision of suitable educational treatment for multiply handicapped children like these is very difficult. The coincidence of defective hearing with a physical handicap needing active treatment is particularly troublesome, and this we hope to be able to deal with eventually in a special unit for partially deaf at Fleming Fulton School.

Tables E20 and E21 show the numbers of boys and girls at Malcolm Sinclair and Fleming Fulton Schools, and the main handicaps causing their admission. Malcolm Sinclair School, now the responsibility of the Belfast Education Authority, is intended to deal only with physically handicapped children of nursery-school age, but owing to congestion at Fleming Fulton School many cannot be transferred until the age of seven or more. This in turn means fewer vacancies than we need for very young children at Malcolm Sinclair House. Plans for reconstruction and enlargement at Fleming Fulton School are well advanced, but long delay in the realisation of these plans is a great disappointment to all of us who deal with handicapped children. The new building will incorporate the nursery department; this will simplify transport and make easier the interchange of pupils and staff between the two units. Meanwhile at both schools the staff are handling their problems with industry and kindness; the difficulties essentially are congested working conditions on the one hand, and a waiting-list on the other.

At Graymount Open-Air School rebuilding went on throughout 1962 and is expected to be finished about mid-1963. This school is to be renamed Cedar Lodge, and its completion will mark a great advance in the education of delicate children. Table E22 shows the number of boys and girls on roll at the end of 1962; the numbers were kept to the minimum because the school had to continue whilst the builders were at work. Some of the pupils were housed temporarily at Fortwilliam School during the reconstruction, in premises which will later be converted for use as a child guidance clinic. The table shows also the children admitted and discharged during 1962, and the disabilities affecting the new admissions. Unlike most special schools Cedar Lodge has a temporary population of children admitted for a period of convalescence, rehabilitation, or treatment; the aim is to tide the delicate child over a period of illness so that he may return to the normal school at the earliest opportunity, his academic progress having been maintained in the interval.

The two special classes for the partially deaf in Harding Memorial and Fane Street Schools continued to work with 10 pupils in each during 1962. Several more such units will be needed in Belfast, but their opening will depend on teachers-of-the-deaf being available. A teacher was seconded in September to the Department of Audiology and Education of the Deaf at Manchester for training.

Work began in 1962 on conversion of the old Greenwood House School into a diagnostic unit. This will be a small school for nursery and early school-age children who are mentally retarded and whose educability is in doubt. The decision about notification as ineducable to the Special Care Service of the Northern Ireland Hospitals Authority under Section 53 of the Education Act is not an easy matter in young children. This unit will enable us to have doubtful children under prolonged observation for as long as may be necessary in the care of experienced staff before making a decision about their education. The school will be in the charge of a teacher who is also a psychologist and the staff will include house mothers able to deal with the many domestic problems, such as incontinence, associated with retarded children. There will be residential accommodation for a few children.

School Clinics

The new Cupar Street Clinic in West Belfast continued to give satisfaction to staff and patients; attendances were good in all departments and the building and its equipment have remained in good order. Large numbers of visitors still ask to be shown over the clinic and we hold meetings, conferences, courses, lectures, and film shows for staff and others from time to time.

Work on the similar new clinic at Lincoln Avenue began at the end of the year. This clinic will replace the old premises at 4 Crumlin Road and will serve the north quarter of the city; all concerned are looking forward to its completion in 1964 with keen anticipation.

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Senior Medical Officer,
School Health Division.

Belfast Grant-Aided Schools

TABLE E 1

Type of School		Number	Pupils
	Nursery Schools and Classes	10	398
Primary‡	County Primary Schools	67	27,918
	Voluntary Primary Schools under Roman Catholic Management	64	18,840
	Special Schools	9	892
Secondary‡	County Secondary Schools	18	14,381
	Voluntary Secondary Schools †(Participating)	21	16,335
	Voluntary Secondary Schools †(Non-participating)‡‡	3	2,602

‡ These groups of schools are considered separately where possible in the following tables.

‡‡ These schools conduct their own schemes of medical and dental inspection and treatment under the provision of Section 42 (6) of the Education (Amendment) Act (N.I.), 1956.

† Includes preparatory school in most cases.

School Medical Inspections

TABLE E 2

Type of School	Sex	Routine Examinations						Nursery School examinations	Special examinations	Re-examinations	Totals
		Age Groups					Totals				
		Entrants	II	III	IV	V					
Primary Schools	Boys	3,324	903	1,853	193	—	6,273	220	301	5,064	11,858
	Girls	3,130	648	1,592	78	—	5,448	159	335	4,129	10,071
Secondary Schools	Boys	102	125	457	2,669	3	3,356	—	72	2,912	6,340
	Girls	121	49	341	2,587	1	3,099	—	109	2,629	5,837
Totals	Both	6,677	1,725	4,243	5,527	4	18,176	379	817	14,734	34,106

Attendance of Parents at Routine Medical Inspections

TABLE E 3

Age Group	Primary		Secondary	
	Boys	Girls	Boys	Girls
Entrants	2,315 (69.6%)	2,255 (72.0%)	52 (51.0%)	53 (43.8%)
II	403 (44.6%)	388 (59.9%)	13 (10.4%)	15 (30.6%)
III	673 (36.3%)	705 (44.3%)	19 (4.2%)	28 (8.2%)
IV	17 (8.8%)	13 (16.7%)	51 (1.9%)	124 (4.8%)
V	— —	— —	— —	— —
Totals	3,408 (54.3%)	3,361 (61.7%)	135 (4.0%)	220 (7.1%)
	6,769 (57.8%)		355 (5.5%)	
	7,124 (39.2%)			

Average Heights and Weights

TABLE E 4

Boys

Age	Number examined			Average weight pounds			Average height inches		
	Primary	Secondary	Total	Primary	Secondary	Total	Primary	Secondary	Total
4	603	15	618	40.5	44.7	40.6	42.0	44.3	42.0
5	2,093	67	2,160	42.9	46.6	43.0	43.4	44.8	43.4
6	628	20	648	45.8	51.2	45.9	45.2	46.8	45.2
7	81	2	83	49.1	48.0	49.1	47.1	44.5	47.0
8	46	2	48	58.1	75.0	58.8	51.3	53.0	51.4
9	776	121	897	65.6	72.8	66.6	53.1	54.9	53.3
10	1,284	131	1,415	70.1	79.8	71.0	54.3	55.9	54.5
11	351	21	372	73.4	83.2	73.9	55.2	57.3	55.3
12	218	305	523	82.1	92.6	88.2	57.2	60.2	58.9
13	137	995	1,132	89.9	99.6	98.4	59.1	61.3	61.0
14	51	1,462	1,513	98.7	105.7	105.5	61.8	62.7	62.7
15	5	212	217	114.6	118.3	118.2	63.9	64.8	64.8
16	—	3	3	—	133.0	133.0	—	66.5	66.5

Girls

Age	Number examined			Average weight pounds			Average height inches		
	Primary	Secondary	Total	Primary	Secondary	Total	Primary	Secondary	Total
4	486	16	502	39.2	40.6	39.3	41.7	42.4	41.7
5	2,052	79	2,131	41.7	45.8	41.9	42.9	44.4	43.0
6	592	26	618	44.7	49.9	45.0	44.3	46.4	44.4
7	50	4	54	48.2	49.5	48.3	46.2	48.3	46.4
8	30	5	35	59.8	65.8	60.7	50.3	52.7	50.6
9	568	40	608	64.9	70.8	65.3	52.6	54.8	52.8
10	1,176	89	1,265	68.1	77.2	68.7	53.7	55.7	53.8
11	295	38	333	74.0	85.3	75.3	55.1	57.6	55.4
12	121	214	335	87.7	99.4	95.2	58.4	61.0	60.1
13	58	849	907	90.1	103.4	102.5	60.3	61.0	61.0
14	17	1,603	1,620	103.0	108.2	108.2	61.3	61.8	61.8
15	3	135	138	111.7	113.6	113.5	59.8	62.9	62.8
16	—	—	—	—	—	—	—	—	—
17	—	—	—	—	—	—	—	—	—
18	—	1	1	—	126.0	126.0	—	64.0	64.0

Vaccination

TABLE E 5

Type of School	Sex	Entrants		II		III		IV		V		Totals	
		No. examined	Number unsatisfactory	No. examined	Number unsatisfactory	No. examined	Number unsatisfactory	No. examined	Number unsatisfactory	No. examined	Number unsatisfactory	No. examined	Number unsatisfactory
Primary	Boys	3,324	957 (28.8%)	903	260 (28.8%)	1,853	535 (28.9%)	193	72 (37.3%)	—	— —	6,273	1,824 (29.1%)
	Girls	3,130	1,062 (33.9%)	648	204 (31.5%)	1,592	450 (28.3%)	78	15 (19.2%)	—	— —	5,448	1,731 (31.8%)
	Both	6,454	2,019 (31.3%)	1,551	464 (29.9%)	3,445	985 (28.6%)	271	87 (32.1%)	—	— —	11,721	3,555 (30.3%)
Secondary	Boys	102	12 (11.8%)	125	25 (20.0%)	457	84 (18.4%)	2,669	776 (29.1%)	3	— —	3,356	897 (26.7%)
	Girls	121	27 (22.3%)	49	15 (30.6%)	341	63 (18.5%)	2,587	905 (35.0%)	1	— —	3,099	1,010 (32.6%)
	Both	223	39 (17.5%)	174	40 (23.0%)	798	147 (18.4%)	5,256	1,681 (32.0%)	4	— —	6,455	1,907 (29.5%)
TOTALS	Both	6,677	2,058 (30.8%)	1,725	504 (29.2%)	4,243	1,132 (26.7%)	5,527	1,768 (32.0%)	4	— —	18,176	5,462 (30.1%)

TABLE E 6

Age Group	Type of School	NORMAL (A)		SUB-NORMAL (B)		BAD (C)	
		Boys	Girls	Boys	Girls	Boys	Girls
Entrants	Primary	3,083 (92.7%)	2,867 (91.6%)	212 (6.4%)	230 (7.3%)	29 (0.9%)	33 (1.1%)
	Secondary	91 (89.2%)	113 (93.4%)	9 (8.7%)	7 (5.8%)	2 (1.9%)	1 (0.8%)
II	Primary	840 (93.0%)	601 (92.7%)	61 (6.8%)	45 (6.9%)	2 (0.2%)	2 (0.3%)
	Secondary	115 (92.0%)	49 (100.0%)	10 (8.0%)	— —	— —	— —
III	Primary	1,758 (94.9%)	1,501 (94.3%)	94 (5.1%)	90 (5.7%)	1 (0.1%)	1 (0.1%)
	Secondary	442 (96.7%)	327 (95.9%)	15 (3.3%)	14 (4.1%)	— —	— —
IV	Primary	183 (94.8%)	74 (94.9%)	10 (5.2%)	4 (5.1%)	— —	— —
	Secondary	2,500 (93.7%)	2,518 (97.3%)	166 (6.2%)	67 (2.6%)	3 (0.1%)	2 (0.1%)
V	Primary	— —	— —	— —	— —	— —	— —
	Secondary	3 (100.0%)	1 (100.0%)	— —	— —	— —	— —
TOTALS	Primary	5,864 (93.5%)	5,043 (92.6%)	377 (6.0%)	369 (6.7%)	32 (0.5%)	36 (0.7%)
	Secondary	3,151 (93.9%)	3,008 (97.1%)	200 (6.0%)	88 (2.8%)	5 (0.1%)	3 (0.1%)

Defects Discovered at Routine Medical Inspection

TABLE E 7

Defect	Type of school	Defective for treatment	Per 1,000	Defective for observation	Per 1,000	Total defective	Per 1,000
Skin	Primary	115	9.8	184	15.7	299	25.5
	Secondary	72	11.2	141	21.8	213	33.0
	Total	187	10.3	325	17.9	512	28.2
Eyes (a) vision	Primary	966	82.4	2,060	175.8	3,026	258.2
	Secondary	708	109.7	1,282	198.6	1,990	308.3
	Total	1,674	92.1	3,342	183.9	5,016	276.0
(b) squint	Primary	155	13.2	364	31.1	519	44.3
	Secondary	38	5.9	123	19.1	161	25.0
	Total	193	10.6	487	26.8	680	37.4
(c) other	Primary	57	4.9	69	5.9	126	10.8
	Secondary	36	5.6	18	2.8	54	8.4
	Total	93	5.1	87	4.8	180	9.9
Ears (a) hearing	Primary	149	12.7	94	8.0	243	20.7
	Secondary	78	12.1	25	3.9	103	16.0
	Total	227	12.5	119	6.5	346	19.0
(b) otitis media	Primary	21	1.8	69	5.9	90	7.7
	Secondary	13	2.0	26	4.0	39	6.0
	Total	34	1.9	95	5.2	129	7.1
(c) other	Primary	31	2.6	37	3.2	68	5.8
	Secondary	9	1.4	13	2.0	22	3.4
	Total	40	2.2	50	2.8	90	5.0
Nose and Throat	Primary	204	17.4	1,272	108.5	1,476	125.9
	Secondary	54	8.4	222	34.4	276	42.8
	Total	258	14.2	1,494	82.2	1,752	96.4
Speech	Primary	68	5.8	172	14.7	240	20.5
	Secondary	23	3.5	41	6.4	64	9.9
	Total	91	5.0	213	11.7	304	16.7
Cervical glands	Primary	9	0.8	84	7.2	93	8.0
	Secondary	—	—	12	1.9	12	1.9
	Total	9	0.5	96	5.3	105	5.8
Heart and circulation	Primary	56	4.8	227	19.4	283	24.2
	Secondary	48	7.4	61	9.5	109	16.9
	Total	104	5.7	288	15.8	392	21.5
Lungs (a)	Primary	172	14.7	269	22.9	441	37.6
	Secondary	41	6.4	110	17.0	151	23.4
	Total	213	11.7	379	20.9	592	32.6
(b) pulmonary tuberculosis	Primary	1	0.1	3	0.3	4	0.4
	Secondary	1	0.2	8	1.2	9	1.4
	Total	2	0.1	11	0.6	13	0.7
Development	Primary	46	3.9	161	13.7	207	17.6
	Secondary	21	3.3	77	11.9	98	15.2
	Total	67	3.7	238	13.1	305	16.8
Orthopaedic (a) posture	Primary	30	2.6	25	2.1	55	4.7
	Secondary	47	7.3	23	3.6	70	10.9
	Total	77	4.2	48	2.6	125	6.8
(b) feet	Primary	134	11.4	201	17.1	335	28.5
	Secondary	101	15.6	130	20.1	231	35.7
	Total	235	12.9	331	18.2	566	31.1
(c) other	Primary	41	3.5	83	7.1	124	10.6
	Secondary	17	2.6	50	7.7	67	10.3
	Total	58	3.2	133	7.3	191	10.5

TABLE E 7 (*continued*)

Defect	Type of school	Defective for treatment	Per 1,000	Defective for observation	Per 1,000	Total de-fective	Per 1,000
Nervous system	Primary	9	0.8	22	1.9	31	2.7
(a) epilepsy	Secondary	4	0.6	12	1.9	16	2.5
	Total	13	0.7	34	1.9	47	2.6
(b) other	Primary	9	0.8	33	2.8	42	3.6
	Secondary	4	0.6	12	1.9	16	2.5
	Total	13	0.7	45	2.5	58	3.2
Psychological	Primary	35	3.0	141	12.0	176	15.0
(a) development	Secondary	4	0.6	28	4.3	32	4.9
	Total	39	2.1	169	9.3	208	11.4
(b) stability	Primary	36	3.1	52	4.4	88	7.5
	Secondary	2	0.3	11	1.7	13	2.0
	Total	38	2.1	63	3.5	101	5.6
Tuberculosis—non-pulmonary	Primary	1	0.1	4	0.3	5	0.4
	Secondary	—	—	7	1.1	7	1.1
	Total	1	0.1	11	0.6	12	0.7
Other defects	Primary	118	10.1	184	15.7	302	25.8
	Secondary	51	7.9	83	12.9	134	20.8
	Total	169	9.3	267	14.7	436	24.0

The numbers of children examined were:—Primary 11,721, Secondary 6,455, Total 18,176.

The visual acuity could not be accurately assessed in 195 primary and 7 secondary schoolchildren; for "Eyes (a) vision", therefore, the numbers examined were: Primary 11,526; Secondary 6,448; Total 17,874.

TABLE E 8

(a) Primary schoolchildren without glasses

		Left eye								Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals
Right eye	6/6	8,777	333	103	49	24	24	10	9	9,329
	6/9	339	713	101	28	19	12	2	3	1,217
	6/12	88	70	171	32	14	9	2	—	386
	6/18	42	45	47	95	17	11	1	—	258
	6/24	11	21	17	31	57	15	2	1	155
	6/36	18	10	10	10	19	44	4	2	117
	6/60	12	5	5	2	1	3	18	—	46
	<6/60	9	3	—	—	—	—	1	5	18
Left eye	Totals	9,296	1,200	454	247	151	118	40	20	11,526

(b) Primary schoolchildren with glasses

		Left eye								Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals
Right eye	6/6	251	50	31	11	4	8	1	1	357
	6/9	48	71	22	4	7	5	—	—	157
	6/12	30	18	34	6	3	2	—	—	93
	6/18	11	13	9	15	1	1	1	—	51
	6/24	6	2	1	1	3	1	—	—	14
	6/36	2	3	3	1	—	1	—	—	10
	6/60	1	1	—	—	—	—	—	—	2
	<6/60	1	—	—	—	—	—	—	—	1
Left eye	Totals	350	158	100	38	18	18	2	1	685

TABLE E 8 (*continued*)

(c) Secondary schoolchildren without glasses

		Left eye								Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals
Right eye	6/6	4,573	202	68	31	36	25	11	8	4,954
	6/9	180	260	50	24	10	4	2	3	533
	6/12	45	51	110	39	15	7	—	1	268
	6/18	44	18	43	87	32	10	2	3	239
	6/24	20	13	16	26	67	20	3	1	166
	6/36	21	8	11	9	21	65	5	5	145
	6/60	13	2	4	5	—	10	57	7	98
	<6/60	5	—	—	1	2	3	2	32	45
Left eye	Totals	4,901	554	302	222	183	144	82	60	6,448

(d) Secondary schoolchildren with glasses

		Left eye								Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60	Totals
Right eye	6/6	297	40	18	8	5	2	2	4	376
	6/9	48	77	23	8	1	2	—	1	160
	6/12	20	24	45	8	2	—	—	—	99
	6/18	6	5	6	14	2	—	—	—	33
	6/24	3	2	6	5	4	—	—	—	20
	6/36	4	—	2	—	1	—	—	1	8
	6/60	1	—	—	1	—	—	—	—	2
	<6/60	—	—	—	—	—	—	—	—	—
Left eye	Totals	379	148	100	44	15	4	2	6	698

Colour Vision

TABLE E 9

Colour Vision	Type of school	Boys	Girls	Total
Normal Defective—safe Defective—unsafe Total	Primary	243 (85.9%) 23 (8.1%) 17 (6.0%) 283 (100.0%)	54 (91.5%) 2 (3.4%) 3 (5.1%) 59 (100.0%)	297 (86.8%) 25 (7.3%) 20 (5.9%) 342 (100.0%)
Normal Defective—safe Defective—unsafe Total	Secondary	2,677 (94.0%) 83 (2.9%) 87 (3.1%) 2,847 (100.0%)	2,492 (97.3%) 63 (2.5%) 4 (0.2%) 2,559 (100.0%)	5,169 (95.6%) 146 (2.7%) 91 (1.7%) 5,406 (100.0%)
Normal Defective—safe Defective—unsafe Total	All Schools	2,920 (93.3%) 106 (3.4%) 104 (3.3%) 3,130 (100.0%)	2,546 (97.2%) 65 (2.5%) 7 (0.3%) 2,618 (100.0%)	5,466 (95.1%) 171 (3.0%) 111 (1.9%) 5,748 (100.0%)

Tuberculin Tests

(Unvaccinated Children)

TABLE E 10 (a)

Age	Number of children available	Offered* tuberculin test	Refused	Tested	Negative	Positive
4	1,121	—	— —	—	— —	— —
5	4,292	2	— —	2	2 (100.0%)	— —
6	1,266	5	1 (20.0%)	4	3 (75.0%)	1 (25.0%)
7	137	8	3 (37.5%)	5	5 (100.0%)	— —
8	83	37	14 (37.8%)	23	21 (91.3%)	2 (8.7%)
9	1,505	931	203 (21.8%)	728	648 (89.0%)	80 (11.0%)
10	2,680	1,623	316 (19.5%)	1,307	1,173 (89.7%)	134 (10.3%)
11	705	397	86 (21.7%)	311	261 (83.9%)	50 (16.1%)
12	858	354	136 (38.4%)	218	182 (83.5%)	36 (16.5%)
13	2,038	772	248 (32.1%)	524	426 (81.3%)	98 (18.7%)
14	3,133	1,121	365 (32.6%)	756	603 (79.8%)	153 (20.2%)
15	354	109	35 (32.1%)	74	65 (87.8%)	9 (12.2%)
16	3	3	— —	3	2 (66.7%)	1 (33.3%)
18	1	—	— —	—	— —	— —
Totals	18,176	5,362	1,407 (26.3%)	3,955	3,391 (85.7%)	564 (14.3%)

* From 10 years onwards the difference between this figure and the number available is accounted for largely by children known to have had B.C.G. vaccination, but includes some who had skin disease or other ailments making tuberculin testing undesirable. At routine medical inspections the younger children are not usually offered tuberculin test unless they are tuberculosis contacts, or their parents request it, or they are nearing 10 years of age.

(Vaccinated Children)

TABLE E 10 (b)

Age	Offered tuberculin test	Refused	Tested	Negative	Positive
7	2	— —	2	— —	2 (100.0%)
8	20	4 (20.0%)	16	— —	16 (100.0%)
9	445	61 (13.7%)	384	2 (0.5%)	382 (99.5%)
10	763	127 (16.6%)	636	26 (4.1%)	610 (95.9%)
11	148	43 (29.1%)	105	5 (4.8%)	100 (95.2%)
12	228	64 (28.1%)	164	6 (3.7%)	158 (96.3%)
13	200	54 (27.0%)	146	5 (3.4%)	141 (96.6%)
14	194	32 (16.5%)	162	2 (1.2%)	160 (98.8%)
15	35	9 (25.7%)	26	— —	26 (100.0%)
Totals	2,035	394 (19.4%)	1,641	46 (2.8%)	1,595 (97.2%)

TABLE E 11

Action to be Taken as a Result of Routine Medical Inspection

Primary Schools

Age Group	Home visits		To Family Doctor		To School Clinic		To Eye Specialist		To E.N.T. Specialist		To Hospital		To Physio-therapist		To Speech Therapist		To Audio-metrist		Other action	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	80	78	40	48	141	145	186	171	—	1	19	24	41	29	25	15	23	20	67	59
II	37	27	6	6	53	36	79	69	3	3	4	7	19	11	5	1	7	5	17	18
III	105	73	20	22	155	128	256	228	6	6	14	20	35	40	15	4	25	14	50	28
IV	11	2	2	—	15	4	30	18	1	1	4	3	3	3	1	—	6	—	10	2
V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	233	180	68	76	364	313	551	486	10	11	41	54	98	83	46	20	61	39	144	107
	413		144		677		1,037		21		95		181		66		100		251	

Secondary Schools

Age Group	Home visits		To Family Doctor		To School Clinic		To Eye Specialist		To E.N.T. Specialist		To Hospital		To Physio-therapist		To Speech Therapist		To Audio-metrist		Other action	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	—	6	6	1	—	2	4	3	—	—	—	—	1	1	—	—	6	3	6	3
II	2	—	4	1	3	2	8	3	—	—	1	—	1	—	1	—	1	—	10	—
III	6	2	9	2	9	10	42	37	—	—	1	2	15	13	5	1	2	2	29	28
IV	72	129	22	29	130	166	293	353	6	6	5	13	24	47	11	3	28	20	89	64
V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	80	137	41	33	142	180	347	396	6	6	7	15	41	61	17	4	37	25	134	95
	217		74		322		743		12		22		102		21		62		229	

TABLE E 12 Re-examinations

Defects for which re-examined	Primary Schools			Secondary Schools			Primary and Secondary Schools		
	For treatment	For observation	Cured	For treatment	For observation	Cured	For treatment	For observation	Cured
Skin	44	139	97	6	62	53	50	201	150
Eyes (a) vision	1,337	2,698	772	936	2,591	406	2,273	5,289	1,178
(b) squint	92	401	17	22	108	5	114	509	22
(c) other	25	25	24	16	21	20	41	46	44
Ears (a) hearing	220	288	178	68	83	47	288	371	225
(b) otitis media	17	26	38	5	15	10	22	41	48
(c) other	12	83	49	2	14	27	14	97	76
Nose and throat	214	1,050	894	37	267	273	251	1,317	1,167
Speech	91	267	151	28	72	57	119	339	208
Cervical glands	16	73	31	—	6	10	16	79	41
Heart and circulation	43	221	99	29	93	40	72	314	139
Lungs (a)	51	230	259	24	152	80	75	382	339
(b) pulmonary tuberculosis	2	18	4	—	11	6	2	29	10
Development	31	124	64	18	77	31	49	201	95
Orthopaedic (a) posture	5	25	39	4	36	37	9	61	76
(b) feet	26	161	118	31	131	129	57	292	247
(c) other	8	65	41	4	60	38	12	125	79
Nervous system (a) epilepsy	4	31	3	2	7	—	6	38	3
(b) other	3	49	11	1	12	10	4	61	21
Psychological (a) development	51	298	32	12	70	17	63	368	49
(b) stability	14	47	12	5	28	11	19	75	23
Tuberculosis—non-pulmonary	—	17	1	—	9	2	—	26	3
Other defects	84	208	223	39	171	164	123	379	387
Totals	2,390	6,544	3,157	1,289	4,096	1,473	3,679	10,640	4,630
		12,091			6,858			* 18,949	

*18,949 defects in 14,734 children (primary 9,193 and secondary 5,541)

TABLE E 13 Intelligence Quotients of E. S. N. Pupils

I.Q.	<45	45–	50–	55–	60–	65–	70–	75–	80–	90–	100–	110–	120+	Totals
Boys	14	14	32	40	64	87	157	180	436	273	123	31	16	1,467
Girls	12	11	33	28	51	101	143	122	251	117	29	5	—	903
Both	26	25	65	68	115	188	300	302	687	390	152	36	16	2,370

Clinic Examinations

TABLE E 14

Reason for examination	Number of examinations	Per cent
Skin	1,407	7.4
Eyes (a) vision	524	2.7
(b) squint	95	0.5
(c) other	210	1.1
Ears (a) hearing	1,295	6.8
(b) otitis media	264	1.4
(c) other	182	1.0
Nose and throat	667	3.5
Speech	127	0.7
Cervical glands	25	0.1
Heart and circulation	374	2.0
Lungs (a)	683	3.6
(b) pulmonary tuberculosis	5	0.02
Development	144	0.8
Orthopaedic (a) posture	12	0.06
(b) feet	100	0.5
(c) other	156	0.8
Nervous system (a) epilepsy	43	0.2
(b) other	49	0.3
Psychological (a) development	902	4.7
(b) stability	212	1.1
Tuberculosis non-pulmonary	3	0.02
Other defects	1,037	5.4
B. C. G. vaccination	3,739	19.6
Tuberculin skin test	2,607	13.7
Pre-anaesthetic examination	4,201	22.0
Total	19,063	100.0

History of Infectious Diseases

TABLE E 15

Age Group	Measles			German Measles			Chicken-Pox			Scarlet Fever			Diphtheria		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Entrants	69.0%	70.0%	69.5%	21.8%	24.4%	23.1%	37.7%	37.6%	37.7%	4.4%	5.1%	4.8%	0.1%	0.1%	0.1%
II	88.3%	88.5%	88.4%	26.0%	30.7%	27.9%	57.8%	59.1%	58.3%	5.6%	9.2%	7.1%	0.1%	0.1%	0.1%
III	88.3%	88.8%	88.5%	24.2%	29.3%	26.5%	56.1%	59.8%	57.8%	7.0%	7.7%	7.3%	0.3%	0.1%	0.2%
IV	89.3%	92.2%	90.7%	21.2%	26.0%	23.5%	61.5%	60.7%	61.1%	9.1%	10.0%	9.5%	0.3%	0.5%	0.4%
V	66.7%	—	50.0%	33.3%	—	25.0%	66.7%	100.0%	75.0%	—	—	—	—	—	—
Totals	81.7%	82.7%	82.1%	22.7%	26.5%	24.5%	51.3%	51.6%	51.5%	6.6%	7.5%	7.0%	0.2%	0.2%	0.2%

Age Group	Mumps			Whooping Cough			Chorea			Rheumatic Fever		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Entrants	31.0%	29.1%	30.1%	25.5%	30.1%	27.8%	0.1%	0.1%	0.1%	0.03%	0.1%	0.04%
II	46.7%	49.9%	48.0%	41.4%	43.2%	42.1%	0.3%	—	0.2%	0.1%	0.6%	0.3%
III	46.3%	46.8%	46.5%	49.5%	51.6%	50.5%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%
IV	51.0%	49.3%	50.2%	56.8%	63.9%	60.2%	0.3%	0.2%	0.2%	0.6%	0.8%	0.7%
V	33.3%	100.0%	50.0%	33.3%	100.0%	50.0%	—	—	—	—	—	—
Totals	42.3%	41.1%	41.7%	42.3%	46.6%	44.3%	0.2%	0.1%	0.2%	0.3%	0.4%	0.3%

TABLE E 16

Handicapped Pupils

Handicap	At special day school		At special residential school		At normal school		At no school		At home tuition		Totals	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Blind	6	8	1	3	—	—	—	1	—	—	7	12
Partially sighted	16	16	4	2	33	24	1	1	—	—	54	43
Deaf	10	7	3	1	—	—	1	1	—	—	14	9
Partially deaf	21	22	7	7	157	94	1	2	—	—	186	125
Delicate	61	60	1	1	63	57	3	—	6	4	134	122
Educationally subnormal	344	235	31	5	1,076	649	12	12	4	2	1,467	903
Epileptic	25	16	1	1	84	64	1	1	2	—	113	82
Maladjusted	46	21	15	4	116	57	1	—	6	2	184	84
Physically handicapped	71	60	11	12	103	100	10	2	7	8	202	182
Speech defect	56	21	2	1	536	220	2	1	2	—	598	243
Total handicaps	656	466	76	37	2,168	1,265	32	21	27	16	2,959	1,805
	1,122		113		3,433		53		43		4,764	
Total pupils	473	355	52	28	1,951	1,140	21	14	21	14	2,518	1,551
	828		80		3,091		35		35		4,069	

4,764 handicaps in 4,069 pupils (2,518 boys, 1,551 girls). Of these 525 children have 2 handicaps, 76 have 3 handicaps, and 6 have 4 handicaps.

TABLE E 17

Single Handicaps

Number of children affected	Handicap
16	Blind
71	Partially sighted
20	Deaf
213	Partially deaf
182	Delicate
1,809	Educationally sub-normal
121	Epileptic
67	Maladjusted
289	Physically handicapped
674	Speech defect
3,462	Total

Dual Handicaps

TABLE E 18

Handicap	Blind	Partially sighted	Deaf	Partially deaf	Delicate	E. S. N.	Epileptic	Maladjusted	Physically handicapped	Speech Defect
Speech defect	—	—	—	5	2	104	1	2	9	123
Physically handicapped	—	3	2	2	2	47	2	1	68	
Maladjusted	—	—	—	—	3	156	3	165		
Epileptic	—	—	1	1	1	44	53			
E. S. N.	1	13	—	68	47	480				
Delicate	—	—	—	4	59					
Partially deaf	1	—	—	81						
Deaf	—	—	3							
Partially sighted	—	16								
Blind	2									

Showing the distribution of 1,050 handicaps among the 525 children who have two handicaps.

TABLE E 19

Multiple Handicaps

Number of children affected	Categories of handicaps coinciding		
	First	Second	Third
1	P. sighted	P. deaf	E. S. N.
1	P. sighted	Delicate	E. S. N.
1	P. sighted	E. S. N.	Epileptic
1	P. sighted	E. S. N.	Maladjusted
2	P. sighted	E. S. N.	P. handicapped
1	P. sighted	E. S. N.	Speech defect
1	P. sighted	P. handicapped	Speech defect
3	P. deaf	Delicate	E. S. N.
4	P. deaf	E. S. N.	Maladjusted
3	P. deaf	E. S. N.	P. handicapped
5	P. deaf	E. S. N.	Speech defect
1	Delicate	E. S. N.	Epileptic
6	Delicate	E. S. N.	Maladjusted
3	Delicate	E. S. N.	Speech defect
4	E. S. N.	Epileptic	Maladjusted
5	E. S. N.	Epileptic	P. handicapped
5	E. S. N.	Epilpetic	Speech defect
3	E. S. N.	Maladjusted	P. handicapped
17	E. S. N.	Maladjusted	Speech defect
9	E. S. N.	P. handicapped	Speech defect
76	Total with triple handicaps		

	First	Second	Third	Fourth
1	Blind	P. deaf	E. S. N.	Epileptic
1	P. sighted	E. S. N.	Epileptic	P. handicapped
1	P. deaf	E. S. N.	Maladjusted	P. handicapped
1	Delicate	E. S. N.	Epileptic	Speech defect
2	E. S. N.	Epileptic	P. handicapped	Speech defect
6	Total with quadruple handicaps			

TABLE E 20

Malcolm Sinclair School

Reasons for admission	Boys	Girls	Total
Cerebral Palsy	12	7	19
Hydrocephalus	1	—	1
Muscular Dystrophy	—	1	1
Spina Bifida	1	2	3
Total	14	10	24

TABLE E 21

Fleming Fulton School

Reasons for admission	Boys	Girls	Total
Cerebral Palsy	23	26	49
Deformities	3	1	4
Fragilitas Ossium	—	2	2
Hydrocephalus	1	1	2
Muscular Dystrophy	1	2	3
Poliomyelitis	2	2	4
Spina Bifida	4	1	5
Total	34	35	69

TABLE E 22

Graymount Open-Air School

Reasons for admission	Boys	Girls	Total
Asthma	9	5	14
Bronchiectasis	1	1	2
Bronchitis	4	2	6
Coeliac disease	—	1	1
Debility	1	1	2
Developmental defect	1	1	2
Eczema	1	—	1
Enuresis	1	—	1
Epilepsy	1	1	2
Heart disease (congenital)	2	3	5
Heart disease (rheumatic)	—	2	2
Maladjustment	—	3	3
Muscular dystrophy	1	—	1
Myotonia congenita	1	1	2
Nasopharyngeal infection	—	1	1
Otitis media	1	1	2
Poliomyelitis	—	1	1
Spastic paraplegia	—	1	1
Number admitted during 1962	24	25	49
Number discharged during 1962	29	27	56
Average duration of stay in months	31	25	28
Total on roll at 31st December, 1962	79	73	152

TABLE E 23

Miscellaneous

Ultra-violet Light Treatments	4,242	
Physiotherapy:		
Children treated	979	
Total attendances	10,813	
Cases discharged	396	
Waiting list	20	
Speech Therapy:		
Total attendances (excluding special schools)	4,789	
Audiometry:		
Children sweep tested at school	7,336	
Children failing sweep test	760	(10.4%)
Children failing individual test	488	(6.7%)
Other children individually tested	1,803	
Children referred to specialist	90	
Cleanliness:		
Children inspected	144,773	
Children found to have nits	6,264	(4.3%)
Children found to have vermin	2,081	(1.4%)
Children cleansed at clinics	3,766	
B. C. G. Vaccinations:		
Vaccinations at School Clinics	3,739	
Vaccinations by other authorities	1,953	
Children tuberculin tested at school	3,955	
Children showing positive reaction	564	(14.3%)
Children showing negative reaction	3,391	(85.7%)
Vaccinated children retested—positive	1,595	(97.2%)
Vaccinated children retested—negative	46	(2.8%)
Nurses' Home Visits	9,548	
Nurses' School Visits (other than routine inspections)	1,270	
Medical Officers' Visits	164	
Eye Specialist:		
Children refracted	4,932	
Children given post-mydriatic examination	2,573	
Children examined for other eye conditions	270	
Children referred for orthoptic treatment	107	
Medical Specialist:		
Children examined at school clinics	124	
Children examined at special schools	119	
General Anaesthetics	4,201	

REPORT OF THE CHIEF DENTAL OFFICER FOR YEAR 1962

School Health Section

Dental Inspection in Schools

During the year 1962, all schools participating in the Health Authority's scheme were subjected to dental inspection, an operation involving 595 visits and in which 72,876 children or 92.5% of the school roll, were involved.

The defective rate at 69.0% shows a slight drop of 1% compared with the 1961 figure. In the year 1953, the defective rate was 79% and the intervening years to 1962 have shown minor fluctuations but a general if somewhat slow decline in the defective rate to the present level. That it has been possible to maintain this trend in the face of high pressure commercial advertising of cariogenic foods, is no small achievement and gives ground for hope that a still more acceptable figure will be forthcoming in the not too distant future. It is apparent that the population is becoming more conscious of the importance of dental health, as shown by an increase in the overall consent rate from 89.7% in 1961 to 92.8% in 1962. Of those consenting to treatment, 30.2% agreed to be treated in School Health Clinics; this compares with 30.8% in 1961.

Attendances at Clinics

Appointments to the extent of 100% of those requesting treatment at school clinics, were issued, and in response 10,179 children attended for treatment. This figure shows an increase of 14.4% over 1961 and must be regarded as reflecting the popularity of the steps which the Health Committee approved for the provision of a more comprehensive treatment service.

Total visits for treatment, exclusive of orthodontic treatment, totalled 27,075 or 2.6 visits per child, while 4,985 children were rendered dentally fit. Return visits for check inspections totalled 10,318.

Treatments

It is little more than ten years since the long daily general anaesthetic session was a feature of the service; sessions when up to thirty or more general anaesthetics were administered and massive numbers of teeth extracted. Those days, if statistics are any indication, would appear to have passed from us and everyone will hope, for all time.

In 1962 the extraction rate per child showed a fractional drop to 0.8 as compared with 0.9 in 1961, while the number of general anaesthetics has decreased by 2.8%.

Conservation continues to play an ever increasing role and the filling rate per child at 2.7, shows a slight increase over the 1961 figure of 2.5, a fact which might reasonably be expected from the increased influx of patients.

The hoped-for decline in the number of patients fitted with dentures did not materialise and remained approximately the same as in 1961.

The Orthodontic Service continues to expand slowly and altogether 148 children were provided with appliances, of which number irregularities were fully corrected in 49 children. This figure might appear small but it must be remembered that the service is in operation very little over a year and treatment is of necessity complicated and prolonged in many patients. The interest of the four Dental Officers, who have taken part in the post graduate instruction, arranged by the Queen's University, has been keen and this has been exemplified by the fact that two of these officers are hoping to proceed to the examination for the Diploma in Orthodontics. The Health Department appreciates the interest and enterprise shown by these Dental Officers and extends to them best wishes for success in this venture.

Maternity and Child Health Section

It will be recalled that, in my previous annual report, the opinion was expressed that the Maternity Section would not develop to any great degree as a treatment service but that there was much that could be done in an advisory capacity.

The 1962 statistics show that there has been no expansion of the Dental Maternity Service, that while 47 patients were inspected (40 of whom received treatment) these figures were in direct proportion to the four month period of 1961. This tendency is only to be expected, as, with the offering of parallel conditions and facilities in the General Dental Services, it is right and proper that maternity patients should use the General Dental Services.

The pre-school section on the other hand has expanded appreciably and it is felt will contiue to do so. It will be seen from table F1 that altogether 284 children were inspected, 244 or 85.9% of whom were found to be dentally defective. This figure is rather high but not unexpected, in view of the fact that no measures, either remedial or preventative, have hitherto been undertaken.

A unique opportunity exists in the Maternity and Child Health Service to establish the foundations of a future school population, which will be more tooth conscious and presenting fewer dental defects. The efforts which Medical Officers and Health Visitors have already made in helping to establish this dental service for this all important priority group have been commendable, but a redoubling of effort is necessary, firstly in the dissemination of the dental health advice which has been provided, and secondly in the persuasion of mothers of the importance of bringing their young children to the treatment clinics from the age of two or even earlier. The Dental Officer would like to see these children before dental disease has started and while it is still possible to apply corrective measures in the matter of diet and hygiene, without such measures appearing punitive to the child.

The present location of treatment clinics is far from ideal to the full implementation of this programme, nevertheless an effort must be made to encourage attendance. Where attendance at a treatment clinic is impracticable, then greater stress must be laid upon the giving of essential advice by Medical Officers and Health Visitors and the encouragement of the mother to consult her own dental practitioner.

General Remarks

In summing up the activities of the Dental Section of the School Health and Maternity and Child Health Services, it is a source of satisfaction that the advances made in 1961 have continued in 1962.

It is a fact however that two of the Health Committee's clinics are labouring under a very severe handicap, Central Clinic by reason of its cold depressing atmosphere and dismal surroundings and Cherryville Clinic by reason of its cramped accommodation and far from convenient location.

The anticipated opening of the new Lincoln Avenue Clinic late in 1964, will be generally welcomed as a much needed acquisition to the North Belfast area, which for many years has suffered from the absence of a convenient treatment centre.

While the Health Committee's centrally placed clinics will continue to serve those areas reasonably convenient, residential areas near the city's fringe are still without Health Centres, at which they can attend for treatment and advice.

At the present time when so much publicity has been given to the high incidence of dental disease in children and more especially in pre-school children, it would seem particularly unfortunate that present financial policies should further postpone the provision of small treatment centres, to cater for a priority group which does not appear to be acceptable in the General Dental Services.

In conclusion, I should like to thank the Medical Officers, administrative staff and Health Visitors in both the School Health and Maternity and Child Health Divisions for the interest and co-operation and general sense of partnership which have been features of the year's activities. To the principals and teachers of the city's schools, I would extend a special word of appreciation for the interest and tolerance shown in the Dental Health programme and dental inspections. Lastly to all members of the Dental Staff, my appreciation of yet another splendid effort in making 1962 another year of achievement.

S. R. SHEANE, L.D.S.,
Chief Dental Officer.

Dental Inspection

TABLE F 1

School Health section					Maternity and Child Health section	
Participating schools		*Special	*Nursery	Non-participating	Maternity	Pre-school
Total on school rolls	78,764	892	398	2,602	—	—
Total inspected	72,876	1,367	298	2,281	47	284
Age group 5 to 7	14,707	127	—	—	—	—
Other age groups	58,169	90	—	—	—	—
Total defective	50,353	946	165	970	47	244
Defective percentage	69	69.1	55.3	42.5	100	85.9
Consenting to treatment	46,733	789	144	—	45	240
By Health authority	14,130	403	55	—	44	239
By own dentist	32,603	386	89	—	1	1
Appointments issued	14,130	403	55	—	44	239
Inspection sessions	595	—	—	—	—	—
Clinic inspections	10,318	—	—	—	5	98

* Extract from participating schools' totals.
Special schools inspected twice annually.

Treatments

TABLE F 2

Participating schools		*Special	*Nursery	Maternity	Pre-school	Totals
Extractions:						
Temporary teeth	5,893	53	12	—	237	6,130
Permanent teeth	2,298	88	—	72	—	2,370
Total	8,191	141	12	72	237	8,500
Anaesthetics:						
General	4,201	78	6	14	131	4,346
Local	2,489	11	1	17	1	2,507
Total	6,690	89	7	31	132	6,853
Fillings:						
Temporary teeth	8,016	90	46	—	259	8,275
Permanent teeth	19,930	393	15	96	—	20,026
Total	27,946	483	61	96	259	28,301
Root canal therapy	20	—	—	—	—	20
Crowns	5	—	—	—	—	5
Inlays	3	—	—	—	—	3
Gingevectomy	6	—	—	—	—	6
Scaling	546	7	1	24	7	577
Dressings	1,224	20	2	30	26	1,280
Other operations	714	12	1	8	22	744
X-Ray films	525	2	—	1	—	526
Patients' provided dentures	40	3	—	3	—	43
Total treatments	45,910	757	84	265	683	46,858
Individuals treated	10,179	169	24	40	186	10,405
Treatments completed	4,985	73	13	9	88	5,082
Treatment visits	27,075	556	66	176	712	27,963
Treatment sessions	5,324	—	—	36	—	5,360

* Extract from participating schools' totals.

TABLE F 3

Orthodontic section	
Patients inspected	184
Treatment required	180
Treatment provided	148
Treatment discontinued	5
Treatment completed	49
Appliances provided	195
Total attendances	1,589
Total sessions	181

TABLE F 4

Clinic accommodation	
Static:	
North	Mountcollyer Street Ariel Street
South	Academy Street
East	Cherryville Clinic
West	Cupar Street
Mobile	Nil

TABLE F 5

Staff complement	
Chief Dental Officer	1
Dental Officers (Full Time)	13
Dental Officers (Sessional)	5
Total (Expressed as Full Time equivalent)	15.2
Anaesthetists	6

Professional staff was fully supported by Dental Chairside Assistants acting in both surgical and administrative capacities.

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